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AIR FREIGHT FOR DEFENSE

By William M. Sheehan*

Many years ago in the capital of old Nippon, crowds gathered to watch the Emperor pass by. Word had gone forth that the Son of Heaven was to wear a new and wondrous cloak, of silk finer than a spider's web, so delicate that it could only be appreciated by persons of superior perception and taste. Many were the exclamations as the proud ruler moved along, gracefully hunching his collar or kicking aside a rebellious fold. Each, fearing his own stupidity, was loath to admit that he could not enjoy the rare spectacle. Until at length one small voice cried out, "But he has nothing on at all." Then others, soon all, agreed that in truth the Emperor's vaunted garment existed only in imagination.

There is a parallel today. Among our people, anxious lest some hostile air force rain upon their homes and industries the same death and destruction that has made a shambles of Old World cities, has grown a hope and belief that the present expansion program will provide us with the strongest, most complete air power ever known. Comforted that tens of thousands of bombers, fighters and other combat planes are on the way, we envision an air arm that will cast over not only the United States but the entire Western Hemisphere a cloak of impenetrable aerial protection.

Yet the cold and obvious fact is that the air force we are planning threatens bitter disillusionment—for want of one unspectacular but essential type of aircraft, the sky truck. As though we provided a mechanized army with tanks and armored cars but no trucks, or a navy with battleships and destroyers but no supply vessels, we are

* Mr. Sheehan is the author of "Air Freight for the United States," 10 Journal of Air Law and Commerce 454 (1939), and "Airplanes for Air Freight," 11 Journal of Air Law and Commerce 187 (1940). He is now technical adviser to Panagra airlines in South America, particularly in connection with the replacement of the freighting activities of the old German airline, Lloyd-Aero Boliviano.

trying to create a balanced air arm without the thousands of troop and cargo transports that modern warfare makes absolutely imperative. Our eagerly awaited cloak of security is nothing but pieces of a fine garment without stitches to hold them together.

Years ago, Admiral Mahan, one of our great naval authorities, said,

> "The student will observe that changes in tactics have not only taken place after changes in weapons, which necessarily is the case, but that the interval between such changes has been unduly long. This doubtless arises from the fact that an improvement of weapons is due to the energy of one or two men, while changes in tactics have to overcome the inertia of a conservative class * * * it is a great evil. It can be remedied only by a candid recognition of each change."

Now there can be no doubt that our leaders have "recognized" the airplane as a new and important kind of weapon. Powerful combat units, discussion in responsible circles of a 125,000 plane air force, indicate that. Even as early as 1931, progressive elements in the U. S. Army, realizing that the moving of troops and equipment by air might be much more effective than hit-and-run bombing, experimented in flying a whole battery of field artillery from one end of the Panama Canal to the other. But the fact that since then so little has been accomplished in military air transportation, and in all published programs for expansion such relatively small emphasis has been placed upon the airplane as a carrier, justifies the conviction that our leadership has yet to recognize the *full* potentialities of air power. Admiral Mahan was right. The interval between discovery of the transport plane as a weapon and its use for tactics, logistics and other military purposes is much too long.

It must be admitted that Germany has suffered less from "conservative inertia" in this respect than have we. For by 1935 she had not only experimented in the flying of troops and equipment but had commenced the large-scale production of a standardized sky truck, the Junkers Ju 52.

So it was that during the battle of Norway the Nazis were well supplied with transport aircraft. Shuttling back and forth like busy ants these Ju 52's, augmented by 40-place Junkers Ju 90's and Focke Wulf Condors, dropped men and material at numerous strategic points. Grey-clad soldiers with rifles, machine guns, light field guns, mine throwers and collapsible motorcycles, were flown over, and beyond the powerful British fleet. Perhaps sea power was not

defeated by air power in that campaign, but it was most effectively circumvented.

More significant was Nazi use of sky trucks in smashing Belgium and Holland. Here appeared both parachute and air landing troops and for the first time, according to R. C. Candee, Chief of the Intelligence Division, Office of the Chief of the Air Corps, was accomplished that which the consensus of military opinion had previously agreed impossible, namely, the capture and holding of ground by an air force.

In the Balkans, high-lift, rough-landing sky trucks were employed with success. In Africa, General Wavell's hard-won gains were lost to mechanized forces refueled in part from aerial tankers. Troops ferried by air are a feature of the present Libyan battle. The strongly defended island of Crete succumbed not to land artillery or naval invaders, but to air borne troops complete with small tanks, maintained by airplanes and gliders.

Finally in the gigantic Russian campaign, although no longer progressing favorably for the Nazis, sky trucks have been a vital auxiliary, without which the German push might have collapsed long ago. For it is not like Napoleon's disastrous invasion, the Nazis are moving behind a 2200 mile front. The difficulties of moving troops and supplies over such an area are stupendous, especially when it has been the avowed policy of the retreating armies to leave nothing but scorched earth behind—no railroad tracks, bridges, roads, tunnels—every square foot of ground subject to hidden mines. That lines of communication have been kept open and a relentless pressure maintained for so long in hostile territory is attributable in part to the fleet of not hundreds but *thousands* of busily shuttling Junkers.[1]

One views these conquests with wonder. How could Nazi Germany, a short time ago completely bankrupt, opposed by the finest army, the most powerful navy and resources of almost the entire world, come to dominate in the space of two years sixteen countries of Europe? Ruthless terrorism, clever Machiavellianism, fifth columning, treachery, deceit—all these, to be sure. But more fundamental has been the power of its armies. Not old-fashioned military might such as that in which France excelled, but a power

1. According to official German statistics, during the period June 22, 1941, to October 31, 1941, on the Eastern front alone, Luftwaffe transports moved up 42,000 tons of supplies, making 30,000 trips, flying a total distance of 12,500,000 miles. For purposes of comparison, all the cargo, freight or express, military or commercial, flown during the entire past year in the United States amounted to about a fifth of the quantity indicated above.

that Admiral Mahan would say resulted from overcoming "the inertia of a conservative class." The ability not only to find new weapons, different types of tanks, guns, combat planes, submarines, etc., but to apply them in changes of tactics. Not the least among these has been use of the sky truck to speed up operations to an unprecedented tempo. Nazi strategists have grasped the real significance of air power. By putting whole regiments on wings, they have embarked upon what may prove to be the most revolutionary change in military thought that man has ever known. War has moved into the third dimension.[2]

The building of armed forces is a matter which civilians usually leave to others. Yet, in the absence of indications that our leaders appreciate the necessity of building large sky truck auxiliaries, constructive suggestions from those engaged in civil aspects of sky trucking are a responsibility. In this spirit, it is proposed to consider, first, what sky trucking facilities the United States has on hand or, so far as is known, on order; next, how sky truck auxiliaries would enhance our military strength; and finally, how such auxiliaries might be obtained.

I.

The only aircraft that have had any appreciable experience moving heavy freight in this country are the sky trucks of the Army Air Corps, for the most part 12 ton, twin-engined Douglasses. Last year the Army's transports, fifty or sixty in number, moved more than 4,000 tons of aircraft engines, propellers and other cargo, operating scheduled runs between four major depots at Middletown, Pennsylvania, Fairfield, Ohio, San Antonio, Texas, and Sacramento, California. The Air Corps' newly formed Air Service Command now claims over three hundred transports for passengers and cargo. Good as far as it goes, but hardly worthy of a first class air power.

Contrast this handful of freighters with the Nazi horde, which by Allied estimates is anywhere from 5,000 to 10,000—probably closer to the latter figure.

For want of the necessary types and quantities of airplanes, no more than four battalions in the U. S. Army are receiving training in parachute tactics. Only recently was the first battalion of 550 men created to study and practice maneuvers involving air

2. "Air power today has decided the fate of nations. Germany with her powerful air armada has vanquished one people after another. On the ground, large armies had been mobilized to resist her, but each time it was that additional power in the air that decided the fate of each individual nation." Henry L. Stimson.

landings. And if one searches published breakdowns of United States warplane orders for future comfort, he will discover only about five hundred additional aircraft destined to supplement our military air transport services during the next few years.

Whereas the carefully planned German air force counts more than *sixteen* percent of its first line fighting strength in the form of troop and cargo bearing sky trucks, Uncle Sam, who maintains garrisons scattered over a third of the earth's surface, had up to a few months ago less than *four* percent of total aircraft strength in this form.

But how might increased emphasis on the production and use of sky trucks contribute to American defense?

II.

The first answer is by direct military utilization of such equipment, both for regular supply auxiliaries and for tactical maneuvers.

Since the dawn of time logistics, or the movement of troops and supplies, has been one of the most fundamental of military problems. "The art of war consists of always having more forces than the opponent . . . at the point where one attacks," said Napoleon—a thought more succinctly phrased by the General Staff School in its *Principles of Strategy*, "Be stronger at the decisive point." Decisive points shift frequently and suddenly. Therefore the need of the fastest possible transport facilities is obvious. A fleet of 1,000 sky trucks divided among army, navy and air corps, although far short of German figures, would go a long way toward speeding up our military supply services.

Now that we are at war there is danger of attack along either coast. Our best equipment, including the all too few mobile anti-aircraft guns, is placed along the Atlantic seaboard. Suddenly aircraft carriers appear off the Pacific shores and send squadron after squadron of bombers to destroy airports, power dams, communication facilities, as well as the forty or fifty percent of aircraft production which lies conveniently bunched there. It might be necessary to move a large amount of troops, guns and supplies across the country with the greatest possible speed. How would the Army accomplish this? Judging by maneuvers up to the present time, by trucks and trains. For although the Air Corps has experimented in moving heavy pieces and troops with side arms, there has never been a truly large scale movement of men with heavy military

equipment in our planes. As a matter of fact, as indicated previously, the Air Corps has never had enough sky trucks to undertake such maneuvers. The citizens of Los Angeles would have to wait three days and two nights for the fastest express trains to reach them from the other coast.

In tying together the far-flung ramparts of our defense area the need of great numbers of sky trucks is particularly apparent. For the advantage of air transportation stands out sharply when contrasted with ten or twelve knot surface vessels. It is regrettable that today our vital outposts in Alaska, Hawaii, the Philippines, Iceland, Greenland, Trinidad, the West Indies, and Dutch Guiana, have no sky truck connection worthy of the name with main bases, but must await slow, plodding marine vehicles for virtually all their needs.

In a letter to Admiral Land several years ago, President Roosevelt wrote, "You and I know, from our work during the war, the disabilities of a navy which lacks an adequate merchant fleet. With all its enormous potential combat power, such a navy is tied to its land bases." Is it not obvious that an air force without aircraft supply vehicles is equally under disabilities? We are spending billions to enlarge our naval auxiliary. Is not creation of aerial auxiliaries just as important?

Strangely enough, the nation which heretofore has shown itself most progressive in development of transportation facilities, that can lay claim to more than a quarter of the world's scheduled airways, one-third the railways, one-half the paved highways, has made no appreciable effort to harness as its servant, even for its military forces, the fastest cargo medium of the day. But, aware that levees, bridges, canal locks, tunnels, road junctions and long, gleaming rail lines are the first objectives of high flying bombers in modern warfare, more and more citizens are beginning to inquire why provision is not being made for vehicles which use the indestructible pathways of the air, the landing fields of which can be any ball park, meadow or level stretch of road, the transport functions of which are not likely to be impaired by civilian congestion in time of trouble.

Even more promising than in naval and military supply systems is the use of sky trucks for maneuvers of attack.

In this connection, the relation of speed to the effectiveness of attack, as propounded by Colonel James L. Walsh to the Army Industrial College, is of interest. Making an obvious analogy to the

fundamental laws of motion set forth by Isaac Newton, Colonel Walsh said:

> "In war, the kinetic energy of attack increases directly with the weight but increases as the square of velocity. Velocity, in turn, increases directly with distance covered in a given time, but inversely with time required to traverse a given distance. Hence, if weight is doubled, striking energy is doubled. But if time is halved, striking energy is quadrupled, and if time is cut down to one third, striking energy is increased ninefold—which perhaps explains the startling effectiveness of today's war."

According to Colonel Walsh's theory, other factors such as fire-power and armor protection remaining the same, the military effectiveness of an army has a cubic relation to its speed of movement. If, as is roughly the case, aircraft transport and combat units are capable of moving ten times faster than surface vehicles, the effectiveness of an army transported in airplanes should then be of the order of ten cubed, or 1000 times, greater than a similar truck- or ship-borne force. To be sure, practical difficulties might prevent the full benefit theoretically possible from being immediately attained. Yet even the partial workability of this stupendous concept is sufficient to justify great reliance upon air transportation in tactical maneuvers of offense.

Because of the importance of speed,[3] some experts now advocate that Uncle Sam lead in taking the final step of evolving air power. They urge that enough of the sky truck type of airplane be constructed as soon as possible to serve as the basis of what, for want of a better term, might be called "airmadas"—fleets of scouts, bombers, fighters, and transports for carrying whole divisions or armies, parachute troops, infantrymen, artillerymen, engineers and all their equipment. Intended primarily to collaborate with land and sea forces, these air units would, however, be capable of independent action in taking and holding territory of strategic importance.

In keeping with the wise principle of retaining military strength within the United States as long as possible and sending it out to points remote from our cities and industries only when it is clear from which direction we were in greatest danger, there ought to be at least four airmadas, one in each corner of the country. That in

3. "The tempo of battle, as many have observed recently, has speeded up tremendously, but the ultimate in our time will be reached not by the Panzer Divisions, not by the mechanized brigades, but by parachute troops and air infantry." Major General H. H. Arnold and Colonel I. C. Eaker in *Winged Warfare*, Harper, N. Y., 1941.

the Northwest would be poised to hop to Alaska, that in the Southwest to Hawaii, the Southeast one to South America, the Northeast to Iceland. For these purposes, a range of approximately 1,500 miles should suffice.[4]

Having decided upon a range, we are in a position to see what loads can be transported. In the following table are shown the weight-hauling characteristics of two long range aircraft produced for the United States air arms. The first, the Boeing B17E, is a recent version of the Army's familiar "Flying Fortress." The other, the Consolidated PBY2-2, a late edition of a distinguished series of navy patrol bombers. The Boeing is a four-engined landplane of about 22 tons when loaded, the Consolidated a four-engined seaplane of about 30 tons. Either could, with minor structural changes such as enlarged doors, seats and bomb racks removed, "beefed-up" floors, etc., be converted into extremely useful sky trucks.

MILITARY LOADS OF POTENTIAL SKY TRUCKS

Range	Boeing B17E (Landplane)	Consolidated PBY2-2 (Seaplane)
1500 mi	16,120 lbs.	24,160 lbs.
3500 mi	10,000 lbs.	14,920 lbs.

It may be that other makes of aircraft would show equally good or better figures. The Douglas B19, for example, gigantic 82 ton landplane recently completed for the U. S. Army, is able to haul a greater load of fuel than a railroad tank car. Probably more useful as freight car than bomber, several thousand of this type could ferry staggering quantities of men and material to remote points in a short time. But the B19 giant is an experimental proposition. It would be years before we could count upon a fleet of them. In the interest of immediate practicability, tried models such as the two selected above would seem preferable.

Supposing the airmada is built around a streamlined division of ten to twelve thousand men, complete with much if not all the equipment now carried in major maneuvers, how many airplanes would be needed for each?

Lt. Colonel Wm. C. Lee, in the *Infantry Journal*, said the number is astonishingly large, yet "not so great that American

4. Such a range would enable the Northwest air force to reach its objective in a single hop—while the Southwest airmada would have a longer single hop to Hawaii —and the Northeast and Southeast forces would have two hops to Iceland and the bulge of Brazil, respectively. It is significant that long range of operations has been emphasized as one of the first needs of our developing air power by many distinguished military authorities, including Major General H. H. Arnold, Deputy Chief of Staff of the Army for Air.

industry should be unable to produce them." According to the writer's calculations, approximately 3,500 sky trucks of the types mentioned above, plus of course, combat airplanes for protection, would be necessary.[5]

Half of the sky trucks would be landplanes, half seaplanes, in order both to spread risks and reduce congestion at landing fields. Many of them would be adapted for specialized uses such as ambulance planes, repair shops, camp kitchens, fuel tenders. Vital equipment would be carried in duplicate to care for washouts. All planes would be equipped for quick loading, rough landing and would carry the maximum loads compatible with reasonable safety. Upon reaching destinations, some would be immediately re-converted to original functions of bombers and long range patrol ships. The balance would wing back to the nearest supply base to ferry in additional supplies.

Scouts, pursuits, interceptors, observation planes, dive bombers and other types of combat planes that the particular situation might require would be there. Dispatched in staggered groups—again to avoid congestions at intermediate or objective landing fields—the entire formation would proceed somewhat like a naval fleet. In front, swift scouts, in constant radio communication with other units, then twin-engined destroyer-like fighters grouped about hard-hitting bombers, and finally the heavily loaded transports convoyed by more destroyer-type aircraft. Just as a naval fleet may proceed at the speed most suitable for its submarines and oil tenders, so the air-mada could move at the speed most suitable for its sky trucks—a relatively slow tempo which would enable greater loads to be carried and, incidentally, permit the convoying planes to escape the necessity of refueling while in flight.

One can imagine circumstances that might cause such an air-mada to be called into action. Major General J. J. Fulano, in command of the Southeast Airmada Division, with headquarters at Tampa, Florida, has received orders to proceed at once to eastern Brazil, where a group of Fascist army officers has assumed control of the government. Having directed an orderly to fetch the heavy, loose-leaf book known as "Plan C," General Fulano studies the key pages.

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5. It is assumed that the airmada division would require sufficient aircraft to carry approximately 20,000 tons of material and 1000 tons of extra fuel. Referring to the capacities at 3000 miles (enabling a 1500 mile hop and return) shown in the above table for the Boeing and Consolidated airplanes, a need of 150 of each for personnel, 80 of each for fuel, 1600 of each to carry material, or a total of 3660 (roughly 3500) sky trucks in all is indicated.

"Military Intelligence reports enemy activity obscured by unusual secrecy at Dakar. Coastal command reports no naval action in vicinity of Trinidad. Revolutionists incapable of strong resistance save, possibly, at Rio de Janeiro."

"That means we had better let Rio go until the hump is under control," concludes the general.

Orders are given. Radios crackle. Hustle and bustle fill dozens of airports from Key West to New Orleans, from Charlottesville, North Carolina, to Pine Bluff, Arkansas.

Wing commanders give orders to group commanders, relayed on by them to squadron leaders, from there to thousands of eager pilots, navigators, radio operators, mechanics, infantrymen, artillerymen, engineers.

Without delay, two parachute battalions in transports accompanied by scouts, fighters and several refueling planes are zooming to their destination at 300 miles per hour. "Take principal harbors and beach points—occupy airports, strategic rivers and lakes—seize control of rail lines and highways from Maranhao to Salvador," is their mission. Intended only to overcome weak resistance or demoralize internal communications where there might be strong resistance, these parachuting pioneers carry mostly light equipment —side arms, wire cutters, dynamite, light machine guns, 60 mm. mortars, folding bicycles.

On their tails come detachments of engineers, specialists in preparing airports, either by expanding existing fields or making new ones in strategic spots previously selected. They are equipped with shovels, dynamite, tractors, scrapers, bull-dozers, giant searchlights, artificial landing strips. With them come several units of anti-aircraft troops with their highly mobile 37 mm. anti-aircraft guns.

Finally, traveling half as fast, come the main forces. Both at the halfway stop at Trinidad and at various destination airports, double landing strips laid into the prevailing wind permit a steady trickle of incoming planes on one side, of outgoing planes on the other. Equipment of air infantry and artillerymen, besides personal luggage, food, tents, rifles, includes most of the items standard for the surface army today. The 134 lb. 81 mm. mortar, the 37 mm. anti-tank gun that shoots 7500 yards, pierces 1½ inch armor like butter and weighs 850 lbs. The 1,470 lb. 75 mm. howitzer, and the

new 105 mm. howitzer that will soon replace the old 75's as standard light artillery piece. Motorcycles equipped with .45 caliber submachine guns—tiny, 2,200 lb. "jeep" liaison cars which can scoot with four men over rough country at high speed—1½ ton utility trucks, 5 ton scout cars. Even our 9½ ton heavy armored cars, 13½ ton light tanks and the huge 15 ton 155 mm. gun, whose 95 lb. shell can be hurled more than 14 miles for the longest range of any field artillery weapon in our army, should be capable of transport in sky trucks such as the Douglas B19—if not in the Consolidated seaplane described above.

With advance detachments in possession of all key points within twelve hours and the more slowly flying main forces commencing to arrive twenty-four hours after the original order to proceed, General Fulano may enjoy a feeling of achievement. Speeding directly over ocean, mountain, jungle, his men will have commenced effective occupation of a strategic region 3,000 miles away within the space of a single day, an accomplishment which would have taken a surface expedition weeks or more.

But the General's duties are by no means near an end. His sky trucks must hourly ferry up more supplies and equipment. Bombs and bomb racks, so that sky trucks remaining with the advance forces may be converted into bombers—machine guns and extra fuel tanks so that others may be converted into long range patrol boats. Spare parts and replacement engines. The large field guns may soon have a daily appetite of something like 44 tons of shells, the small field pieces 179 tons, the howitzers 256 tons, the rifles 209 tons of bullets. His men will need each day about 135 tons of food supplies, a part of which may be obtainable from the occupied country. Combat and scout planes and surface vehicles may use several thousand tons of fuel a day. To meet such demands, the General's sky trucks have a maximum daily ferrying capacity of 22,875 tons, granted supplies have been previously located at the advance base at Trinidad—of 11,437 tons if operating back to the main base in the United States. In either case it should be ample quantity, even allowing for crackups and other mishaps.

Although responsibility for upkeep of aircraft may devolve on allied divisions and facilities at Trinidad may be available for major repairs, General Fulano will rely on his ten or twelve thousand supra-marines, men of exceptional ability and training, for first aid to disabled planes. As time allows, however, more and more service detachments will be ferried up to advance stations, grad-

ually freeing the air infantry and artillerymen for their primary function of fighting.

The foregoing, of course, is not intended to constitute a prophetic picture of the hop-skip-and-jump warfare of the future. No one can clearly foresee that. But it does purport to convey an idea, based upon the performance and capabilities of current types of aircraft, of what could be done to put an army on wings.

Nor is there any desire to gloss over obstacles which must be overcome before independent airmadas of occupation may be relied upon as instruments of military tactics. Some of the problems seem almost insuperable. Adapting large aircraft for landing on rough terrain or for containing heavy, concentrated loads. Training airport layout engineers and selecting highly skilled mechanical infantrymen and artillerymen. Procuring sufficient pilots. "Airlining" equipment and ordnance to minimum weight and bulk. "Fitting" pieces that can not be broken down into smaller sections. And, above all, organizing the entire operation so that when the time comes, it may be conducted with the smoothness and swiftness that success demands.

But no matter how great these problems, we should be able to count upon the ingenuity of American military authorities to work them out. For the core of the idea is sound—airplanes *can* carry large military loads in addition to the fuel necessary for their return to bases of origin—a large number of the appropriate types can carry to and maintain at remote destinations entire divisions or armies. The difference between what has been proposed herein and what has been done already by the Luftwaffe is one of degree only. However the difficult details may ultimately be worked out, the outlines are apparent.

A matter for reflection is that what we could do, others could, too—perhaps first. It is not a preposterous suspicion that Germany, with its megalomaniac-led war machine which has already had tremendously valuable experience in the use of parachute and air landing troops in various situations abroad, might attempt sudden penetration of this hemisphere by airmadas, wholly or in part.

Years before this war began, Nazi pilots were flying great four-engined commercial airliners, the same type that made the 3900 mile non-stop flights between Berlin and New York, regularly from western Africa to Brazil. Even though chief Nazi require-

ments in the war have been for short-range aircraft, long-range equipment has not been neglected. The economical oil-burning Diesel aircraft engine (which we so unwisely overlook) has been perfected to the point where for long distances it compares favorably with our highly developed, fuel-hungry gasoline engines. Powered with four of the Diesels, Germany's 22 ton Dornier Do26 flying boat, now in use as part of the counter-blockade, can fly 5,593 miles on less than four tons of fuel. The more conventionally powered (gasoline) Focke Wulf Kurier could in less than eight hours transfer thirty or forty men, or four tons of supplies, from Dakar to Brazil. It is reported to have an all-out cruising range of 10,000 miles.

"The only thing that can defeat air power is an air force that can go up and stop it," said Billy Mitchell. Surely the thing most likely to discourage ambitious, air-minded aggressor nations from developing long-range airmadas capable of flying over our Atlantic fleet and funneling into some inaccessible and possibly hospitable territory far from our own bases, is the existence of just that sort of air force in the United States.

III.

Another important use of a sky truck auxiliary would be of indirect military value, i.e., in speeding up rearmament production.

A fleet of three or four hundred transports similar to those now employed by the Air Corps, to haul only heavy, bulky materials, parts, tools, supplies and products of our vital war industries, would hasten the day when we can feel prepared for any contingency. Utilizing essentially the same routes and stops as existing airlines—probably operated as a new and separate transport activity by them—this cargo service would connect practically every important industrial center by air. Rearmament transportation would be on a six to ten fold faster basis. The industrial areas of either coast, three thousand miles apart, would be merely a day's flight from each other.

Not only the magnitude of our rearmament program, but the evident determination of the Government to spread the work about in order that every available industrial plant contribute to the nation's effort, places a tremendous emphasis upon swift commodity transportation. Parts for bomb-sights, rangefinders, new and secret apparatus, have always been produced in isolated shops, then assembled elsewhere under strict surveillance. Now, production

of such large objects as ships and tanks are subject to this transport-burdening "sub-contracting." In the vital aircraft manufacturing industry itself, where more than fifty-five percent of requirements for fabrication are shipped, on the average, over 1,500 miles for assembly, there is a great and growing need of a freight service swifter than that of trucks and trains.

Beyond our borders there may soon be an even greater need for a sky truck auxiliary. Certain raw materials, tin, rubber, antimony, vanadium, manganese, essential to American industry, are imported in part or in whole from abroad. Many of these now come from the Orient, a source which even the most confirmed optimist will admit might suddenly be cut off. Despite stock piles, in some cases all too inadequate, we are likely to have urgent need for such materials produced outside the country if war troubles grow.

Fortunately we may fill most of our wants in countries to the south. Tin from Bolivia, antimony from Mexico, vanadium from Peru, cinchona from Colombia, rubber and manganese from Brazil. We may also supplement our own supplies of copper and nitrates from Chile, of wool, tungsten and hides from Argentina, of bauxite from the Guianas.

But how will we transport these materials up to the United States? By surface vessels, to be sure. Yet no one knows, if or when the worst came to pass, how many merchant ships we might have, or whether marine commerce with South America would be free from hostile naval action. Even if we had enough vessels and adequate convoy protection, a fleet of six or seven hundred cargo planes, which by flying directly to inland mines and plantations would be free of the notoriously inadequate transport facilities of mountain, jungle and desert covered South America, might well be a precious asset in days to come.

There remains to be considered what we have in this country of a non-military character that might be used for industrial sky-trucking.

We have, of course, an efficient but expensive AIR EXPRESS service, operated jointly by the airlines and railroads, whereby shipments are carried in small compartments in the same planes with passengers and mail. This operation is neither by experience nor size of accommodations suited for large scale heavy freight activity.

It is a grave error to assume, as do some students of the transportation problem, that in event of a crisis the 350 aircraft of domestic airlines and 150 airplanes of the country's foreign airlines could readily be converted to use either for industrial transportation or some more direct military purpose. They would be wholly deficient not only from the point of view of numbers, but also in types and, most important, in organizational experience.

If the need suddenly arises to move important supplies or a large force in the quickest way possible, we can not simply commandeer all transport planes as the French pressed into service all the taxicabs of Paris during World War I. Modern warfare is highly dependent upon careful long range planning, and the problems inherent in air transportation are vastly greater than those of surface transportation. The interior of our conscript planes would have to be revamped—floors reinforced—hatches put in. Airports would have to be prepared, supplies cached. Without previous extensive practice, the use of these few hundred airliners might prove quite disastrous.

Moreover, it is doubtful whether the airliners should be relieved of their vital function of speeding army officers, government officials, businessmen, technicians, mail and urgently needed small parts across our broad country. Defense efforts would be seriously impaired. The British, pressed as they are for anything that will fly, have found it expedient to maintain ninety-five percent of their pre-war commercial air schedules. The Germans have even added to theirs, using new equipment for the purpose.

Military or commercial, our sky trucking assets are practically nil. Incredible as it may seem, we do not appear to have even the will to correct this situation. But can it be corrected? Can this hole in our defense armor be plugged in time?

A careful, reasoned answer is in the affirmative—*if*, and only if, we act immediately and our action is decisive and energetic.

IV.

The need of at least 16,000 sky trucks has already been mentioned, 1,000 for the regular supply auxiliary of the army, navy and air force, 14,000 for the four airmada divisions, 650 for airlines operating to remote sections of the Western Hemisphere, and 350 for industrial rearmament transportation within the United States. They should be divided among three existing types of

aircraft, short-haul and long-haul landplanes and long-haul seaplanes, and should be available well before the earliest possible date of any hemispheric invasion attempt.

It might be wise to plan the building of 16,000 sky trucks per year, until a total of sixty or seventy thousand has been secured, when a 16,000 annual replacement would serve to maintain the nation's sky truck auxiliaries in proper, modern condition. After the first critically needed 16,000 had been allocated for the purposes indicated above, subsequent production could augment them, and, to an even greater extent, replace slower surface facilities as they become worn or destroyed. If, as at the moment seems likely, a battle of transportation is to continue for many years whether there be war or peace, and if the freight portion of total airline activity is ultimately to reach the dominating proportion of seventy-five or eighty percent as in every other form of transportation, an objective of sixty or seventy thousand sky trucks is by no means disproportionate for a nation which has a peace-time need of 5,000,000 surface trucks, 11,500,000 tons of cargo vessels and 1,750,000 freight cars.

16,000 planes per year would require a productive rate of about 45 per day, a more conservative figure than the 1,000 airplanes daily desired by Mr. Ford or the 500 suggested by C. I. O.'s Walther Reuter, even allowing that the sky trucks are larger planes. Incidentally, if, as appears preferable, sky truck production is added to the military plane production already planned, in such a way as not to interfere with it, the President's 50,000 military planes per year objective should be reached in 1942 or 1943, instead of 1944, the date heretofore set for its accomplishment.

How much of a burden upon the nation's productive capacity would be involved in adding 16,000 transports per year to the aircraft already planned? According to calculations of T. P. Wright, one of the country's outstanding authorities in these matters, we should produce approximately 28,000 trainers, bombers, pursuits, etc., in 1942, 39,000 in 1943, 49,000 in 1944.

There are two features about the sky truck program, as distinguished from other types of military aircraft construction, that make possible rapid increase of production: 1) concentration on a few types, and 2) no design changes.

1) Our presently planned production calls for forty or fifty different types of military aircraft. It is generally conceded that

despite the great advantages of standardization the complexities of modern aerial warfare prevent the use of any smaller number of models. Thus, on the average, we are producing something like five or six hundred planes of each type per year, and at peak production in 1944 will average barely more than 1000 planes of each type. The sky truck program would call for at most only three makes of aircraft, each, incidentally, devoid of the instruments, accessories, gadgets, trappings and highly specialized armament that characterize combat planes. Production would average 5000 planes of each type. As a result, sky truck construction would have a much better chance of achieving "mass production" than any other type of airplane fabrication.

2) Manufacturers of combat planes, like the dog after the mechanical rabbit, are continually striving for unattainable perfection. Each time a new idea promises better performance, production is stopped, blueprints revised, tooling changed, new jigs built. Like the woman who was afraid to stop adding to her house lest the spirits punish her, engineers seem to be forever withholding a final O K and large scale production is always "just around the corner." Nor is this fussiness avoidable in combat plane production. An air force would be foolish to risk its precious pilots in equipment even slightly inferior to that of the enemy.

But there would be none of this delay in building sky trucks. The three chosen types of aircraft would be copied as they were, with the readjustment of providing larger doors, stronger floors and loading facilities which do not exist today. As with the Nazis' Junkers Ju 52's, the objective would be quantity rather than quality.

To effect such a program legislative and executive action would of course be necessary. A chief of production appointed by the President and empowered to commandeer all necessary non-military production capacity. Drop hammers, turret lathes, drill presses, hydropresses, grinders, shapers, milling and boring machines as well as labor, materials and factory space would be appropriated "for the duration" from the automobile or any other industry as might be necessary. Blueprints, jigs and dies would be scattered throughout private industry in order that scores of them might be copied, installed and used as quickly as possible.

The Government has provided for creation of new manufacturing capacity to build annually 10,000 long range bombers of the Flying Fortress and Consolidated Flying Boat types. A difference

between this and the program proposed herein is that, plane for plane, sky truck production would be considerably easier of attainment. Moreover, while the bombers in themselves are a drain on our supply of materials, the sky trucks would to a great extent help replenish them.

As a corollary of sky truck expansion, we would have to make great efforts in other directions, too. To get the most out of our supra-expeditionary force, we would need more and better airports within the United States—all the air bases that can be procured beyond our borders. We should have to train tens of thousands of mechanics, navigators, radiographers, meteorologists. Pilots, too, would be a problem, although sky trucking would enable good use of our "overage" men and provide a training field for inexperienced military fliers. With sky truck designs frozen for a year or so, time would be given for very desirable research along the lines of specially designed freightplanes[6] for use in subsequent standardizations. Gliders, too, merit intensive research. For sooner than we think they may be to air cargo what boxcars are to railroads, trailers to highway trucking.

To many the advent of peace seems so remote that to mention plans for the post-war world is a waste of time. Yet peace is sure to come, and, like the holocaust itself, may happen sooner than expected. At any rate, so great an expenditure[7] as this sky truck program would necessitate ought not be made without consideration of its relation to cessation of hostilities. Pursuits and bombers, like destroyers and battleships, will be so much junk at war's end. Vehicles designed for fighting are bound to be inefficient and uneconomical for other purposes, such as commercial transportation, particularly air freight transportation. But the sky truck would be useful, come war or peace. Of the fifty or sixty billions which at this writing have been spent or committed to defense purposes, little will be as usefully invested as would be the funds for these sky trucks.

The sky truck program here presented is essentially an emergency one. We should, of course, prefer it to grow slowly and

6. "It is not unlikely that a new cargo type, the heavy freight carrier, will shortly appear in the military arms of the leading nations. There is some evidence of it abroad and there is a general demand among the tactical units and in the supply agencies for such a type in this country. * * * The designs submitted to date point to a fairly slow plane with great weight-lifting ability and particularly designed for the rapid loading and unloading of freight. * * * The trend toward the general use of air infantry necessitates a troop transport of large capacity." Major General H. H. Arnold, op. cit., p. 16.

7. Cost of the 16,000 planes per year should approximate three billion dollars.

surely—even as the French and British intended that and other phases of aviation to grow in their countries. But if we have to defend this hemisphere, we shall probably not be given all the time we should like by our enemies. Transportation may well be the key problem, a large fleet of sky trucks a precious aid. Along with all the other rearmament demands those sky trucks would entail a burden on the energies and pocketbooks of the American people. But the rewards would be great—a modernly geared army and navy supply system, a rearmament industry that functioned with utmost speed and efficiency, the world's fastest, most deadly striking units. And these, with the program of combat plane construction upon which we have already embarked, would provide us with the cloak of protection that we are all so anxious to see.

1941 ANNUAL AERONAUTICAL LAW REPORT*

By George B. Logan

Because of the importance, in my opinion, of two proposals concerning aviation, legally, these proposals will be first discussed, and if time permits, court rulings will be taken up last.

It is earnestly requested that, if you cannot lend me your ears, you at least bend them my way until you hear of these proposals.

There is a proposal that there should be a Federal Aviation Liability Act. There is also a proposal that the American Bar Association withdraw its support of the Uniform Regulatory Act.

With the genius I have at getting things backward, I will discuss the last one first.

You will recall that this Association worked assiduously in connection with the Aeronautical Law Committee of the American Bar Association in the preparation of the Uniform Regulatory Act. The work began, as far as the American Bar Association is concerned, in 1929; as far as the National Association of State Aviation Officials is concerned, it began with the formation of the Association in 1930. This Uniform Regulatory Act was finally approved at our National Convention at Cheyenne, in 1934. It was approved by the American Bar Association and by the Commissioners of Uniform State Laws at the Annual Meeting of the American Bar Association in San Francisco in 1935.

That law, or those exceedingly similar to it, has had the backing of our Association, and having had the support of the American Bar Association, as activated through the Commissioners of Uniform State Laws, has been enacted, and is now in force in many states.

The present Aeronautical Law Committee of the American Bar Association, at least four out of five members, has, in the past year, conceived the idea that this Uniform Regulatory Act is unwise, should not have been approved, and should no longer be encouraged by the American Bar Association. In short, the Committee has taken

* This Report is made each year to the National Association of State Aviation Officials by Mr. Logan, its Counsel, and is officially published by the Journal of Air Law and Commerce.

the view that, in the future, all regulations of aeronautics shall be by the Federal Government and that there should be no further encouragement of regulation by the several states.

Whether this is a part of the current philosophy which has recently seized so large a portion of our population, so that most of our citizens now-a-days are prone to say, "Let the Government do it," is difficult to determine.

The queer thing about the position of the Aeronautical Law Committee of the American Bar Association is that there is no criticism whatsoever of the terms of the Uniform Regulatory Act. The terms of the Act were not discussed or considered. No one has pointed out any of its short-comings; no one has levelled a finger at any defects; no one has indicated that it does not work.

The arguments made to date have been purely legalistic and run something like this:

> "By the passage of the Civil Aeronautics Act in 1938, Congress evidenced an intention to regulate interstate commerce by air. The whole field of aeronautics is per se interstate commerce or potentially interstate commerce. Hence, it falls within the commerce powers of the Constitution. Congress, therefore, has the right to regulate all aviation. Such a bill would undoubtedly be held constitutional by the Supreme Court. Therefore, we should have a federal law; therefore, we should cease to recommend the passage of the Uniform State Regulatory Act."

With the first five sentences of the foregoing, no one can quarrel. Congress has evidenced an intention to go farther in the regulation of aeronautics than it did under the Air Commerce Act of 1926. Most aviation is either interstate commerce or potentially such. Congress has, probably, the power to regulate all of it. The Supreme Court probably would hold such a law constitutional, but it is an absolute non sequitur to say that it thereupon follows as a necessity that there *must be* a federal regulatory act and *should not* be state acts.

Who has been the complainant? For one, I have heard none outside the sessions of the Aeronautical Law Committee—and one or more suggestions by members of the Civil Aeronautics Board that it should be the *sole* regulation body.

If there is any one thing clear in the relation between the Federal Government and the several states in the regulation of aero-

nautics, it is that there be uniformity. The Uniform Regulatory Act makes uniformity with federal regulations absolutely essential. Uniformity has been achieved by the very terms of the act. If the states are to be elbowed out of the aviation picture, it is certainly not because their regulations conflicted with those of the Federal Government.

It is true that there are one or two states which have been unwise in some of their regulations—but these states do not operate under the Uniform Regulatory Act, and hence, all the more reason why all states should be urged to enact the Uniform Regulatory Act.

It is true also that there have been one or two brushes between the Federal Authority and the State authorities, but, irrespective of who was right in these touch-and-go disputes, it certainly does not follow either that all State officials should be abolished or that all Federal officials are dumb. It is safe to say that, where these brushes have occurred, they did not occur in states where the Regulatory Act was in effect.

Under the rules of the American Bar Association, recommendations of committees are submitted, first, to the House of Delegates of the Association. The recommendation that the American Bar Association withdraw its support (given since 1935) of the Uniform Regulatory Act, was adopted in the Aeronautical Law Committee by a vote of four to one, and was accordingly submitted to the House of Delegates at its meeting in Chicago last December.

The writer prepared a minority report, urging that the House of Delegates do not accept or approve the recommendation. The House of Delegates, after hearing the Committee report, and after reading the minority report, voted to table the recommendation of the Aeronautical Law Committee.

In the final analysis, my disagreement with the Aeronautical Law Committee is not one based on law. My disagreement, I believe, rests upon more fundamental grounds. The creed in which all of us believe with respect to aviation is that the development of civil aviation is, in view of today's world status, of the utmost importance to the safety of the future of this country.

The development of military aviation alone is not sufficient. We cannot rely forever on airplanes owned and manned by the Army and Navy for our complete and future salvation. We must rely

upon the fullest possible use of this new and unequalled method of transportation—a method of transportation which transcends all barriers, whether rivers, oceans, or steel and concrete lines. It is purely a question of transportation and not a question alone of firepower or bomb-carrying capacity. This was proven at Crete—when all the British Navy could not stop Germany from transporting troops and supplies enough to capture this island.

From the standpoint of transportation, the future of this country requires not that we have thousands of military planes, but that we have millions of civil planes and millions of civilians who know how to fly them.

To attain this requires the concerted effort of every agency in the United States which knows anything at all about aviation. To attain this requires the active, moving, educational and financial aid of every governmental body in the United States—not only the Federal Government, but each State Government, and as many municipal and county governments as may be enlisted in the cause.

Above all things, the attainment of this end does not call for the rebuff, cold shoulder, and curt dismissal of the forty-eight states, which are, in effect, being told by the Aeronautical Law Committee: "We do not need you nor your State Aviation Officials, nor anybody else. The Federal Government is alone sufficient and we want no more State Regulatory Acts."

But just what does a regulatory act have to do with this picture? Regulating aviation as such does not help it, except in the sense that keeping the industry within bounds of reasonable safety and reasonable responsibility, gives it some intangible aid. What really helps aviation is the financial *encouragement*, the educational and guiding help that is given to the cause of civil aviation by every forward-looking public official. I know of no state official who has not performed the functions of his office in that manner. But when you have eliminated the regulatory features, you have eliminated the possibility of creating state aid. You have made it politically impossible to secure appropriations for the payment of salaries and expenses to men who are unselfishly devoting their lives to the cause of civil aviation, and in fact, to the cause of future salvation of this country.

Legislators love to "regulate"—so do government officials. Legislators are slow to "encourage"—so is the Government. But the Uniform Regulatory Act has been acceptable to the state; regula-

tion was at the ideal balance—enough to make the act appeal to non air-minded legislators—and not enough to hamper aviation.

The statesmanship of aviation calls for united support. It does not call for a jealous division of official functions. It cries out for cooperation, not for elimination of help. Above all, what is *not* needed is the churlish attitude of, "We can do this without you."

One look at the personnel of the Civil Aeronautics Board, and at the number of its highly competent officials who are now in Federal positions, is sufficient to demonstrate that the training ground and the laboratory of aviation experience, which has been responsible for the production of these key men, has been in the fields of *state regulation.* Without the state regulation of the past ten years, it is safe to assume that the Civil Aeronautics Board would be as helpless as a major league baseball team today if playing on the sand lots had been prohibited by law ten years ago.

Eliminate the state regulatory acts and you eliminate state aviation officials. Eliminate state aviation officials and you abolish the "training camp" for Federal officials.

The Proposed Federal Liability Act

Some of the same philosophy of the Aeronautical Law Committee has unfortunately cropped out in the proposal for a Federal Liability Act.

This has been brought to our attention by the report of the Civil Aeronautics Board, through a study of proposed aviation liability legislation. This report has been given rather general distribution and comments are invited to be presented to the Civil Aeronautics Board. The report was prepared by Mr. Edw. C. Sweeney, with the advice and assistance of Mr. Samuel E. Gates, International Counsellor, and Mr. Edw. M. Weld, of the Board's Legal Staff.

There is some history back of this which we should understand. Prior to 1921, studies of aeronautical legislation were begun by a Committee of the American Bar Association in conjunction with the National Conference of Commissioners on Uniform State Laws. The so-called Uniform State Law of 1921 was adopted as a result of these studies and passed by fourteen states. Among other things, this law provided that the operators of aircraft should be absolutely liable for all damage done to persons and property on

the ground, but that other liabilities, such as injuries to persons not on the ground, passengers, collisions, liabilities, etc. should be controlled by the ordinary rules of negligence. I will not go into a discussion of the merits or demerits of this particular law. Insofar as absolute liability to persons and property on the ground is concerned, the decisions of our courts have almost universally held that this is true, without any statute, and the law is unmistakably developing along this line. The other liability rules are being steadily established by court decisions.

However, several years ago, the Conference of Commissioners on Uniform State Laws instructed its committee on aviation to undertake the study of a Uniform Liability Act (very different from the Uniform Regulatory Act approved in 1935), and for a time, the Chairman of this committee was likewise the chairman of the Aeronautical Law Committee of the American Bar Association. These committees held meetings and conducted hearings as to what should be contained in such a Uniform Aviation Liability Act. There was never any agreement on the terms of such an act, nor on the question as to whether or not such an act was needed or desirable.

The proposed act was never presented to the American Bar Association, and in 1938, that Association withdrew its sponsorship and participation. Nevertheless, the Commissioners on Uniform State Laws, at their meeting in Cleveland in 1938, approved and adopted this act over the protests of aviation interests. The provisions of the act were opposed by the Air Transport Association of America, by various private pilot associations, and by aviation insurance underwriters.

The Commissioners did not go so far as to recommend the adoption of the act to the legislatures of the several states, and in December, 1938, the Commissioners held a meeting with representatives of the Air Transport Association of America to determine whether or not it would, at that time, recommend the passage of the act by the several states.

The Civil Aeronautics Authority was invited to participate in the meeting and advised the Commissioners on Uniform State Laws that it had entered an order for a study to be made of the subject. As a result, the Conference of Commissioners decided to withhold promulgating the act to the legislatures until the Authority had a reasonable time to complete the study.

This study has been completed.

Let me say, first, that the study evidences a tremendous amount of painstaking and careful work. Mr. Sweeney and his associates are to be highly complimented for the industry shown and also for the judicial attitude adopted in summarizing the pros and cons, or perhaps I should say the positions of the proponents and the opponents of the various phases of the act.

They have studied and given us adequate and detailed reports on such related questions as (a) the need of such legislation; the measure of liability (b) to persons and property on the ground; (c) to passengers and guests of common carriers; (d) to passengers and guests of private carriers; (e) liability with respect to baggage and personal effects of passengers; (f) liabilities to owners, and operators and passengers of other aircraft in collisions; (g) extent of permissible recovery in cases of death and personal injury; (h) provisions for enforcing recovery, i.e., collecting the damages; and (i) the legality of a federal statute on the subject.

Let me say, in the first place, that I have no fault to find with the conclusions of these gentlemen as to the legality or constitutionality of the law they propose. Having said this, I should probably sit down. Perhaps my only justifiable reason for discussing any of these subjects before this body at any time is that my profession as a lawyer permits me to discuss the legal phases of proposed aviation legislation. But obstinately enough, that is not what I propose to discuss.

I propose to discuss the very first point that I mentioned; item (a), the need for such legislation; and propose to disagree with the recommendation of the authors of the report that there should be a Federal Aviation Liability Act.

At one point in the report, the statement is made that there is no public demand for the act. I do not take technical advantage of this statement, as an admission against interest, but I do stand on the fact. Unless we keep close hold of this fact, we might, as we read the four hundred odd pages of the report, become convinced that there is a crying need for the Government to do something about the persons who are killed and injured by airplanes, to the end that they be duly compensated for these injuries. Likewise, if we read only the headlines in the newspapers, we might think there was a crying need. But please keep fast hold of the fact that, during the six years beginning with the year 1934 and ending with the year 1939, less than 1,000 people have been killed in airplane accidents

and approximately only 400 severely injured and approximately 700 with minor injuries. In other words, in the whole United States, in all of the six years, with all of the millions and millions of miles which have been flown, this is the sum total of the accident record of all flying operations of all types. No wonder there is neither public demand, nor need, for this legislation.

In the year in which the largest number of planes in the history of aviation was being operated, namely, 1939, with 12,704 planes in operation, there were 144 people killed. Although more people were killed in 1940, the number of accidents per passenger mile flown greatly decreased.

The sole justification for urging federal legislation, of the sweeping and revolutionary type that is urged, is apparently based upon several classroom conceptions.

These appear to be, (a) that aviation is an inherently dangerous business; (b) that injured persons are at a disadvantage in presenting and proving claims due to lack of available evidence and competent counsel; (c) that aviation operators alone (and not any of the general public) shall carry the burden of developing this industry —so essential for national welfare and national defense.

To support the statement that aviation is a dangerous business are figures that "accident frequency" is greater in aviation than in automobile transportation or railroad transportation—but look—upon the basis of passenger fatal accidents per vehicle miles travelled, the airlines surpassed the safety record of the railroads in 1939 and have surpassed that of the inter-city busses from 1934 to date. When you take into consideration the non-fatal injuries, as well as the fatal, the air carriers were twelve times safer than the railroads, and infinitely safer than the bus lines.

The assertion that the injured person, whether he be a passenger or on the ground, is at a great disadvantage in proving his case, is based, I fear, upon the opinion of lawyers who have a too thorough understanding of evidence and a too skimpy understanding of aviation.

Discuss this problem with any lawyer who is a pilot (which I am not) and I believe he will agree with the statement often expressed by aviation lawyers, and that is, "show me an accident where there was negligence and I can produce competent evidence to prove the negligence."

No showing is made in the report that plaintiffs bringing suits for aviation accidents have been badly treated by the courts. In fact, it is quite evident that the courts have been just as quick, through judges and juries, to render verdicts for injured plaintiffs as they have in any other field of negligence actions. This is made clear in the report, but for some reason, which it is difficult to understand, the fact that the common law is progressing satisfactorily with respect to this new form of transportation does not seem to be sufficient. In spite of this fact, and in spite of the fact that there is no public demand, a new system of liability by federal law is recommended.

The scope of this paper, designed as it is to lighten the tedium and the dullness of your Convention, and to bring many a quip of gay laughter, does not permit of a detailed discussion of the proposed law.

I wish to point out one thing, though, which will probably come as a shock to most of you; and that is that it is recommended that this law which will apply to interstate commerce, commerce which is potentially interstate, and to all flying on a "designated civil airway," *requires liability insurance.* This is not revolutionary with respect to the air carriers, but it is revolutionary with respect to the vast majority of non-scheduled commercial operators and is distinctly original with respect to private flying.

It would be just as revolutionary as if the Federal Government should propose that all interstate bus lines, all interstate truck lines, and all pleasure automobiles which operate on a United States Highway should be required to carry liability insurance. How much such a law would have pushed back the development of the automobile industry, if passed twenty-five years ago, is beyond calculation; how much it would injure the automobile industry, if passed today, is likewise beyond calculation. But the report shows that it would add between $1,500,000 and $1,750,000 *per year* to the cost of non-scheduled and private flying aviation!

In support of this unique proposal, it is suggested that the proposed legislation is based upon the same philosophy as workmen's compensation, namely, that the injured persons should themselves not be required to bear the burden of injuries arising from the conduct of a necessary business. In urging this comparison, the fact which is overlooked is that the two things are not even alike. The injuries to coal miners, arising out of the necessary operation of coal

mines, is shifted from the injured persons to the employer, because the employer can, in turn, shift this loss to the entire coal-consuming public, and is further shifted by industrial coal consumers to the whole public. The employees of air line operators are already covered by workmen's compensation and the cost is shifted in transportation charges to the general public.

But when you attempt to impose the same thing on persons operating automobiles for pleasure, or aircraft for pleasure, you overlook the fact that the loss is simply shifted from one small group to another small group, and cannot be shifted to the public at all. The comparison is as surprising as it is inadequate.

Perhaps the recommenders of the legislation do not realize how far-reaching their proposed Federal Liability Act will be when they say it is limited to those persons traversing the designated civil airways. It is true that not every airport in the United States is on a civil airway, but it is likewise true that it is practically impossible to get out of any state in the union without crossing a civil airway. You cannot go over a civil airway—you cannot go under a civil airway—unless you burrow under the ground. This is not good for airplanes. Hence, the proposed liability act, though it makes a fine show of not covering intrastate pleasure flying, actually does cover *all* flying.

It does seem that in this day and age when every possible encouragement should be given to civilian use and acceptance of planes (subject to the present emergency of producing them) that the time is not ripe to pass such far-reaching, crippling, legislation.

Nor, indeed, is the time going to be ripe when this war is over, because, when the war is over, with manufacturing facilities ten times what they were before the war began, either the public must accept and use airplanes or nine-tenths of the factories will remain closed.

There could be no greater harm done, not only to the future of aviation, but to the future of the United States, than to add the width of a single brick to the height of the financial wall which has heretofore been the chief obstacle to public acceptance of the airplane.

The difficulty with all of us, I fear, including legal theorists, is that we permit our theories to take possession of and overpower our sense of realism.

Airplanes are startling, but not mysterious. The automobile was originally quite startling and appeared to be mysterious, but is no longer so. It was, of course, a mystifying sight to see a buggy or a wagon careering down the street without horses, and it is a mystifying sight to see a vehicle like an automobile careering through the air without touching the ground. But after all, aviation is simply another method of transportation—amazingly simple and amazingly beneficial.

The Federal Government followed a wise policy with respect to the automobile. There was no federal liability regulation of automobiles until there were approximately thirty-two million of them, and then the regulations applied only to a small fraction of those, namely, the interstate busses and trucks.

In the meantime, rules of liability governing automobiles developed sanely and satisfactorily. The new instrumentality had not been hindered by theoristic regulations. The same course should be followed by the Federal Government with respect to airplanes.

In a recent speech, Mr. Robert H. Hinckley, formerly chairman of the Civil Aeronautics Authority, and now Assistant Secretary of Commerce, propounded a question and gave an answer:

> "What will we do with this unparalleled productive power when the flow of military orders dries up? Will we condemn the hundreds of thousands who are going so hopefully into aviation skills to a return to relief?
>
> "I don't believe we will. I believe that as a nation we will sprout wings, just as we sprouted wheels. All first-class mail will go by air. There will be feeder air lines to smaller cities and pick-up service to the villages. Our air lines carried three million passengers last year. Two years after peace returns to the world they will carry twenty million, and half a million Americans will be flying their own planes."

I say to Mr. Hinckley, your answer was right, but it will not remain right, nor will your prediction come true, if we eliminate state aid and the aid of state officials by withdrawing support from the Uniform Regulatory Act; and your answer will not remain right, nor will your prediction come true, if the Civil Aeronautics Board supports or urges Congress to pass the proposed Federal Liability Act, which will do more to discourage private flying than any other possible step which the Federal Government could take.

SAFETY REGULATION—RELEASE NO. 71

Another matter to which your attention should be called is the very unusual release, dated October 18, 1941, which was issued by the Bureau of Safety, Civil Aeronautics Administration, as to a change in safety regulations effective September 25, 1941. This is called "Part 525—Notice of Construction or Alteration of Structure on or Near Civil Airways." It is a new regulation by the Administrator of Civil Aeronautics to supersede a former one promulgated by the Civil Aeronautics Board.

It is not necessary to quote this regulation in full. Suffice it to say, that it is now required of any person who engages in the construction of a structure within twenty miles of a civil airway (in other than congested parts of cities, towns or settlements) to give notice in advance to the Administrator of Civil Aeronautics, if any part of said structure is to or may become greater than 150 feet above ground level, or greater than five feet above ground level for each five hundred feet or fraction thereof of the distance from the nearest boundary of any landing area. For the full text of the regulation, see page 72, infra.

We shall first stop and consider the area that the first half of this notice considers. A civil airway is twenty miles wide, being ten miles on either side of its center line. Therefore, the term "within twenty miles of a civil airway" means within thirty miles of either side of this center line, or a belt sixty miles wide. To put it another way, and considering our American counties as an average, it means that no one in a strip approximately two counties wide can build such a structure without first notifying the Administrator of Civil Aeronautics. There is a penalty of $500.00 for failing to notify.

The first thought which comes to the reader of this new regulation is how and by what means is a reasonable notice of this requirement to reach the affected public so that they may be warned of the existence of this regulation in order to avoid its infractions and its penalties.

The writer is quite well aware of the fact that everyone is "presumed to know the law," but even in these days of the multiplications of administrative bureaus and the super-multiplication of bureaucratic regulations, the regulations are usually mailed to an enormously large class of persons presumably affected, so that there is at present at least a chance of the knowledge of the existence of

the regulations before time for compliance. Even publication in the Federal Register (known to but few of our citizens) is scarcely a practical answer.

This regulation, it seems, was adopted on September 25, 1941; the date of the release was October 18, 1941; but the date of actual mailing must have been about November 25th, for it was received in St. Louis on November 27th. Is it at all likely that it has reached even a fraction of the persons concerned? What is more, there is a fifteen day deadline for offending structures under construction on the effective date of the regulation.

Another thought occurs as one reads this regulation. Apparently, the purpose of the notice is to warn the users of the air space, to-wit, pilots. A structure 150 feet high is not built over night. It does not suddenly appear as a threatening menace to air navigation. It is erected slowly and foot by foot and reaches the law violating height—but only after there must have been ample evidence of its beginning, its progress, and its approaching maturity.

During all of this time, the pilots using the particular civil airway must have observed it and must, in pursuance of the regulations, have reported it. And if it was so far out of the airway that pilots didn't see it, it couldn't possibly be a menace, and why report it?

And by what authority are the civil airways suddenly increased in width, by inference, at least, from twenty miles wide to sixty miles wide? And why would a person presumably using a civil airway get more than ten miles away from the imaginary center line —in other words, what is the reason for enlarging, inferentially, the civil airway to a belt sixty miles wide?

And then another thought which goes through the writer's mind is, how likely is there to be a structure 150 feet high outside of a "congested area"? Office buildings, church steeples, cathedral spires, etc., etc., are usually built in cities and towns and the regulation does not apply to congested areas in cities and towns.

And, finally, why this first half of the regulation at all, as long as the existing civil air regulations require planes to fly at least 500 feet high, even in uncongested areas?

Now the second half of the regulation is something different. This required notice of any structure higher than five feet for each 500 feet distance from a landing field has some sense to it, because this is in the area of permitted low flying. With a 500 foot gliding

angle, pilots should be protected, if possible, against unnecessary hazards, but, again, how is effective notice to be given to the thousands and thousands of people who live within five hundred feet to five thousand feet of a landing field? These persons are likely to build fifteen foot high bungalows or thirty foot high two-story houses, or forty foot high two and one-half story houses, and would violate this regulation by failing to notify the Administrator of Civil Aeronautics if the bungalow happens to be within fifteen hundred feet of the edge of an airport, or if the two-story house happens to be within two thousand feet of the edge of an airport, or if the two and one-half story house happens to be within four thousand feet of an airport.

Roughly speaking, this subjects to possible penalties the builders of residences within a mile wide belt surrounding all landing fields in every city, town, and village of the United States which has a landing field; or putting it another way, subjects to possible penalties the builders of homes on an incalculable number of square miles of subdivision property surrounding the landing fields of the United States. And how are they going to hear about it?

Bear in mind that there is no penalty for building these structures—indeed, there is no law of which I am informed by whcih either the Civil Aeronautics Board, or any other authority, can prevent the building of these structures at any of the locations described, without a violation of a zoning law. Nothing can be done about it. It's only the failure to give the notice that is punishable.

Would it not seem a great deal simpler and more effective to impose the duty of giving such notice on the proprietors of landing fields, who can very easily be informed of the requirement of the regulation, and who can likewise very easily give notice to the Administrator of the building of any structure within a mile of the airport? It is certainly simpler to obtain the desired information by requiring it of the several hundred known airport proprietors who can be reached by letter, than by requiring it of the many thousands of unknown possible builders of houses who cannot be reached by any method at all.

The writer is in sympathy with any move to give timely notice of obstructions in the airspace, but neither part of this regulation seems to be well-considered, or likely to accomplish such a result, and seems much more likely to impose useless penalties on innocent citizens.

1941 DECISIONS

Wm. J. Knipe v. Skelgas Co., Iowa Sup. Ct., Dec. 10, 1940.

In a case involving the Workmen's Compensation Law of Iowa, a rather stinging rebuke was administered by a progressive and forward-looking Supreme Court to a company which itself was engaged in one of the newest of businesses and was itself pioneering a new field.

Billy Knipe had been employed by the Skelgas Company to sell stoves which would burn butane (designed for off-the-line gas consumers) and also to sell Skelgas (the so-called bottle gas) to like users of stoves in the surrounding territory. When employed, he signed a written application. On the application were some very interesting statements which remind one of the pep talks given by insurance general agents to their solicitors. Among the phrases used in this pep talk were: "We need hustlers; men and women who are aggressive—Skelgas employees must be wide awake, alive to every opportunity, progressive. Our employees must be able to develop new ideas, they must possess initiative."

Young Mr. Knipe evidently took these instructions seriously and in good faith. He went out to an airport to interview a prospective customer who was wide awake enough to own an airplane. While there, he met a former official of the Skelgas Company, who was also wide awake enough to own a plane. This latter plane owner was about to depart from the field and asked Mr. Knipe where he was going, and when told that he was going to a town about forty miles away and to another town about twenty-five miles away, the owner offered to take him by plane and return him to his home. The trip was made to both towns without incident, and in both Knipe saw and talked with prospects for Skelgas outfits. Upon the return trip, something went wrong with the engine, the plane fell and young Knipe was severely injured, suffering a fractured skull and a broken leg.

He naturally claimed his workmen's compensation from his employer, whereupon the employer claimed that his injuries did not arise "out of and in the course of his employment." The company further amplified its position by saying that they did not contemplate that he would attempt to seek customers by the airplane method.

The Supreme Court disposed of this argument in very short order, saying:

"In 1926, the first year of scheduled flying, in this country, 5,782 brave souls travelled in small, single-engine planes.

"In 1940, giant multi-motored airplanes will carry more than two and one-half million men, women and children.

"Air travel today is a commonplace mode of transportation, and the appellee cannot be said to be guilty of a rash act, in furthering the appellant's business in travelling by airplane to call upon customers. Knipe's injury arose out of and in course of his employment. He was entitled to the benefits of the Workmen's Compensation Act and the lower court was right in so holding."

Peavey v. City of Miami, Florida Sup. Ct., April 15, 1941.

Abbott v. City of Des Moines, Iowa Sup. Ct., June 17, 1941.

We have heretofore discussed in several annual reports the question as to whether or not a city, in operating a municipal airport, is functioning in its governmental capacity, and hence not subject to the liabilities of a private corporation, or whether it is functioning in its proprietary capacity and, therefore, subject to the same liabilities as private corporations.

This past year has given us some very doubtful help. Two cases have been submitted to courts of last resort and one decided that the city was acting in a proprietary capacity, hence liable; and the other decided that it was acting in a governmental capacity and hence not liable.

The first case, Peavy v. City of Miami, was a suit by a pilot against the City of Miami, for injuries received when landing on the field while a runway was being repaired or rebuilt. The pilot sustained serious personal injuries. There was a companion suit by the corporation owning the plane, which was seriously damaged.

The allegations of negligence were that the City had failed to properly light the obstructions on the airport, had failed to properly warn, etc. The case was, in the final analysis, really decided against the plaintiffs on the ground of their own contributory negligence, but also raised in the case was the question of the extent of the liability of the municipal corporation in the operation of the airport. The Court held:

"The weight of judicial authority seems to hold the operation of an airdrome by a municipality to be a 'proprietary' function, as distinguished from a 'governmental' function."

The Court cited, among other cases, the case of Pignet, et al v. City of Santa Monica, et al. (29 Cal. App. 2d 286) and Mollencop v. Salem (139 Ore. 137) which have previously been discussed by me in reports heretofore made.

The other case above referred to is that of Abbott v. City of Des Moines. This was a case in which the owner of an airplane brought suit against the City of Des Moines as proprietor of the airport, for damages resulting from fire which destroyed a stored airplane, and which fire was claimed to be due to the negligence of the City. The Supreme Court of Iowa did not refer in its decision to any of the other cases concerning airports, but based its decision chiefly upon the Iowa decisions relating to operations of public parks, bathing beaches, and other similar properties.

There was also in Iowa a statute which was practically controlling of the situation. This statute gives certain cities in Iowa the right to acquire, establish, improve, maintain, and operate airports. A section in the same chapter of the statutes provides that any property so acquired, owned, or controlled, for the purposes enumerated in the chapter is declared to be controlled and operated as a "public purpose," and the liability of the City should be no greater than that imposed upon municipalities in the operation of *public parks.*

It having been many times decided by the high courts of Iowa (as well as by many other states) that, in the operation of a public park, the City is operating in a governmental capacity and not liable, it was but a simple step to conclude that the operation of an airport was in a governmental capacity; hence the city was not liable. This is clearly a case of applying a proper statutory construction—not an authority for changing what appears to be the majority common law rule.

Osa Johnson v. Western Air Express Corp., Calif. District Court of Appeals, 2nd District, Div. No. 1, June 30, 1941.

Our old friend, and by now it should also be your old friend, res ipsa loquitur, bobbed up again "in absentia" in one of the more famous airplane accidents of the past.

You will all recall that, on the morning of January 12, 1937, Martin Johnson, the famous African explorer, was killed, and his wife, Osa Johnson, very seriously injured in the crash of a Boeing near Burbank, California.

Not only were the law points which were decided in this case rather unusual, but the facts involved in the accident were quite unusual. This is one of the few instances in which a plane has crashed after the pilot, flying by instrument, had located the field, being within sixteen minutes of the field, flying at an elevation of 7,000 feet, and having the fact verified by communication from the field where the announcement of his arrival within a few minutes was made. This was a foggy morning, the pilot having been held at the airport of Daggett, California, on the last leg of a trip from Salt Lake City to Los Angeles, and was finally directed to proceed from Daggett less than an hour away, by air, to Burbank, by way of Saugus. He passed directly over the Saugus "cone of silence," as he predicted at exactly 10:50 A. M., and radioed that he would make a right turn, would come back over the "cone of silence" at Saugus at 10:57 and arrive in Burbank at 11:06. He passed over the Saugus "cone of silence" again at 10:57, exactly as predicted. He was then seventeen miles from Burbank Airport and 5,500 feet high.

In proceeding from Saugus to Burbank, letting down through the fog, he unaccountably went three miles off his course to the left or east, and in attempting to regain his position crashed in the San Gabriel Mountains, at an elevation of approximately 3,500 feet. The pilot survived and testified at the trial. No explanation was given except that in coming down below 5,500 feet, the plane encountered great turbulence of air and icing conditions. He testified that he instructed the co-pilot to turn on the wing de-icer and the carburetor de-icer, but for some unaccountable reason, the co-pilot failed to do so. The ship, therefore, thereupon became unmanageable. Not enough power could be maintained in the engines to give the plane speed enough to maintain its elevation, nor could the pilot control the direction of the plane due to the icing of the wings. The result was that the plane crashed.

The case was submitted to the jury on the specifications of negligence of failure to use the de-icer, failure to maintain proper flying speed, and failure to follow the radio beam, the pilot having testified that when he got down to 5,500 feet, he cut off the radio beam to use what the pilot called "average compass reading."

The jury found a verdict for the defendant, and the Court refused to disturb this verdict on the ground that such a verdict was an implied finding that the failures in the particulars above described were not negligence and that this was a question solely for the jury.

The plaintiff then contended that the court, as a matter of law, should have instructed the jury that this was a "res ipsa loquitur case" and that negligence was established by the very facts of the crash, and that the Court should have so instructed the jury. The answer to this, as we now all know, was that the case was not pleaded originally as a res ipsa loquitur case, but was pleaded originally on the specific acts of negligence, and when specific acts of negligence are pleaded, res ipsa loquitur goes out of the window, and is, therefore, "in absentia."

One of the interesting side lights of this case, and one which the writer feels must have had something to do with the result, was the fact that there was combined in the same suit a suit by the Administrator of Mr. Martin Johnson's estate, for the damages resulting from his death, and a suit by Mrs. Osa Johnson for her personal injuries.

It is, of course, the law in California, as in many other states, that the earning capacity and the pecuniary conditions of the survivors of a decedent is not to be put in evidence in a death case, but only the loss to them by reason of the death of the decedent; whereas, in a suit for personal injuries, the earning capacity of the injured plaintiff is a matter for consideration by the jury.

The earning capacity of Mrs. Osa Johnson, even after her own severe injuries, was very great, and it must have been obvious, therefore, to the jury that she had not suffered severely financially either by the death of her husband or by her own injuries. One cannot help but feel that this factor was of considerable influence on the minds of the jury in finding that the pilot was not negligent. It is fair to assume that in a death case, at least, there might have been a verdict for the plaintiff for the death of Mr. Martin Johnson, and the loss of his earnings, had it not been so evident that the financial independence of the survivor was assured.

AVIATION ABC's OF THE RAILWAY LABOR ACT

By C. Allen Elggren and Robert M. McCraith*

I. Introduction

Common carriers by air and their employees are subject to the Railway Labor Act in the same manner and to the same extent as carriers by rail and their employees. The Act similarly applies in the case of a carrier by air transporting mail for the United States Government, whether or not it is a common carrier.

The following is designed to explain, as simply and briefly as possible, the major features of that legislation. Purposely, we have not included qualifications and possible differences of interpretations as such refinements would require much fuller treatment.

II. The Approach

The purposes of the Act are:

> "(1) To avoid any interruption to commerce or to the operation of any carrier engaged therein; (2) to forbid any limitation upon freedom of association among employees or any denial, as a condition of employment or otherwise, of the right of employees to join a labor organization; (3) to provide for the complete independence of carriers and of employees in the matter of self-organization; (4) to provide for the prompt and orderly settlement of all disputes concerning rates of pay, rules, or working conditions; (5) to provide for the prompt and orderly settlement of all disputes growing out of grievances or out of the interpretation or application of agreements covering rates of pay, rules, or working conditions." (Section 2)

To achieve these purposes the Act provides primarily for the settlement of disputes by the interested parties. The Act seeks to promote settlement by imposing certain standards of conduct and providing facilities to be used only in the event mutually satisfactory disposition of disputes can not be reached by a carrier and the representatives of its employees.

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Among these facilities is the National Mediation Board, created primarily to aid the parties to come to agreement where prior negotiations between them have failed.

This Board possesses no powers of enforcement; its primary function is not to end strikes but to prevent them.

Adjustment boards are another facility which is required to be established. Their function is to handle labor disputes arising out of the interpretation of written agreements. The Act does not prescribe their make-up, except in the case of the National Air Transport Adjustment Board (which has not been set up). Boards other than the National Board are established by agreement and their functions may, therefore, be limited.

Arbitration is provided by the Act, but it is not compulsory. The creation of Emergency boards is also provided for, but their powers extend only to investigation and recommendation.

No policing agency is created by the Act. Even the National Mediation Board has only narrowly circumscribed administrative functions. In this respect that Board is quite different from the National Labor Relations Board or the Civil Aeronautics Board.

The Act is based largely upon voluntary compliance and voluntary agreements between employer and employees.

III. Duties In Collective Bargaining

The Act imposes a series of duties intended to stabilize the relationship between carrier and employee. *Some of these duties are merely directory, and not enforceable by penalties, while others are enforceable by formal penalties.* The duties are:

A. *Carriers and their employees shall "exert every reasonable effort to make and maintain agreements."* (Sec. 2, First)

This is perhaps the principal duty imposed by the Act.

This duty does not require that agreements be made. All that is required is reasonable effort, on both sides, to agree. And negotiations need not be terminated within any specified time.

The Act provides no penalty for failure to comply with this duty. But see the discussion on the penalty provisions of the Act in part VIII of this memorandum.

B. *"All disputes between a carrier or carriers and its or their employees shall be considered, and, if possible, decided with all expedition, in conference . . ."* (Sec. 2, Second, Sixth, Seventh; Sec. 6)

The Act contemplates two types of disputes between carriers and their employees. They are, *first,* those arising from differences between the parties as to *changes* in agreements covering rates of pay, rules and working conditions, and, *second,* those growing out of grievances, and the interpretation or application of labor agreements. In either type of dispute the Act requires that conferences be held, that the parties get together, talk things over, and make an honest attempt to reach an agreement.

The National Mediation Board has taken the view that its mediatory services can be invoked only "where direct negotiations between the parties, diligently and conscientiously conducted, have exhausted all possibility of effecting agreement."[1] (Disputes between rail carriers and their employees coming before the National Railroad Adjustment Board have also been remanded for failure to comply with this requirement.)

In order that the parties to a dispute may not avoid the obligation to confer, the Act requires that the time and place of conference be fixed within a certain period after receipt of notice of a desire to confer. The period within which conference must begin differs in the two types of disputes as does the penalty applicable should a carrier fail to comply with the requirements of the Act.

As to changes in agreements, the statute requires that both carriers and employees give "at least thirty days' written notice of an intended change in agreements . . . and the time and place for the beginning of conference between the representatives of the parties interested in such changes shall be agreed upon within ten days after the receipt of said notice, and said time shall be within the thirty days provided in the notice." A willful failure or refusal by *a carrier* to comply with this procedure concerning proposed changes in labor agreements is a misdemeanor.

In cases involving grievances or the interpretation of agreements, the time and place for conference must be agreed upon within ten days after receipt of notice of desire to confer. The conference must be held not to exceed twenty days after receipt

1. The Railway Labor Act and the National Mediation Board, page 10 (Gov't Printing Office, August, 1940).

of a request for conference, but a reasonable time must be allowed for the parties to reach the place of conference. Unless otherwise mutually agreed upon, the place of conference must be upon the line of the carrier involved. No penalty attaches under the Act for failure to follow this procedure. But see the discussion on the penalty provisions in part VIII of this memorandum.

Notwithstanding the foregoing, the Act specifically provides: "That nothing in this Act shall be construed to supersede the provisions of any agreement (as to conferences) then in effect between the parties." (Sec. 2, Sixth)

C. *A carrier may not alter the rates of pay, rules or working conditions, where notice of intended change has been given, or conferences are being held with reference thereto, or the services of the National Mediation Board have been invoked, until the controversy has been finally acted upon under the provisions of the Act.* (Sec. 2, Seventh; Sec. 6)

This duty is applicable to that type of dispute which deals with proposed *changes in existing agreements.* It might be argued that it does not apply to negotiations where no prior agreement or contract exists.

During conferences dealing with such dispute, or while such a dispute is in the hands of the National Mediation Board, this duty requires that the status quo be maintained as to *those things in controversy.*

In the case of such disputes, where the services of the National Mediation Board are *not* invoked, a period of ten days must elapse after termination of conferences, during which there is no request for or proffer of the services of the National Mediation Board, before a change may be made. Where the National Mediation Board proffers its services or its services have been invoked and it is unable to bring the parties to an agreement and the parties refuse to submit the controversy to arbitration, "no change may be made in the rates of pay, rules or working conditions or established practices in effect prior to the time the dispute arose" for a period of thirty days after the receipt of written notice from the National Mediation Board that its mediatory efforts have failed.

A carrier's willful failure to comply with these requirements is a misdemeanor.

The purpose of the periods of waiting is to give the parties to a controversy an opportunity to "cool off." The foregoing periods

of waiting, and that referred to in Part VII of this memorandum, are the only periods of waiting prescribed by the Act.

D. *Carriers are required to file with the National Mediation Board copies of each contract with its employees covering rates of pay, rules and working conditions.* (Sec. 5(e))

The requirement extends both to new contracts and to changes in old ones. They must be filed within thirty days after the execution of the new contract or changes in old ones have been made effective. In those cases where no contract exists between any craft or class of employees a "statement of that fact" *must* be filed, together with a "statement of the rates of pay, rules and working conditions applicable in dealing with such craft or class." Any change in such rates, rules or conditions must be reflected in a statement filed within thirty days after such change becomes effective.

There is no penalty for the failure to comply with this provision. But see separate discussion on penalty provisions in part VIII of this memorandum.

E. *Carriers are required to notify their employees that all disputes will be handled in accordance with the provisions of the Railway Labor Act.* (Sec. 2, Eighth)

This provision further authorizes the National Mediation Board to specify the form, times and places where such notification is to be posted. Also it is required that the notice include a verbatim reproduction of paragraphs 3, 4 and 5 of section 2 of the Act. (These paragraphs relate to the selection and choice of bargaining representatives by the employees.)

The National Mediation Board has prescribed a form of notification, in accordance with this authority. *This form must be used.*[2]

Willful failure to comply with the above provision is a misdemeanor.

F. *Neither carriers nor their employees "shall in any way interfere with, influence, or coerce the other in its choice of representatives."* (Sec. 2, Third)

Willful breach of this provision *by a carrier* is a misdemeanor.

2. See appendix for copy of form prescribed by National Mediation Board.

G. *Nor may carriers do anything to induce employees to join or not to join a labor organization.* (Sec. 2, Fourth and Fifth)

The statute makes it "unlawful" for any carrier to interfere in any way with the organization of its employees. It may not use its funds in maintaining or contributing to a labor organization or labor representative, nor may it assist in the collection of dues, fees or assessments of a labor organization by deducting them from the wages of its employees.

Employees have the right under the law "to join, organize, or assist in organizing the labor organization of their choice," without being questioned in any way by a carrier.

Carriers are specifically prohibited from requiring employees to sign "any contract or agreement promising to join or not to join a labor organization."

Willful failure on the part of a *carrier* to comply with these provisions is a misdemeanor.

Unions sponsored and dominated by carriers have been eliminated by these provisions. See *System Federation No. 40 v. The Virginia Railway Co.*, 300 U. S. 515 (1937). "Closed shops" are also forbidden inasmuch as a carrier may not require any employee to become a member of a labor union.

H. *Carriers shall "treat with" duly designated representatives of employees.* (Sec. 2, Ninth)

When a dispute arises among the employees of a carrier as to who are the representatives of such employees, the responsibility rests with the National Mediation Board, upon request of one of the parties to the dispute, to conduct proceedings and determine the true representative or representatives of such employees.

Having made that determination, the Board will certify the representative or representatives to the carrier. It is then the duty of the carrier to "treat with" that representative for purposes of the Act. There is no penalty for failure to comply with this duty. But see discussion on penalty provision in part VIII of this memorandum.

IV. Adjustment Boards

For the purpose of providing a means of adjusting and settling disputes arising from grievances and the interpretation or applica-

tion of labor agreements the Act provides for the establishment of adjustment boards. Adjustment boards are of two general types.

A. *System, group, regional, or temporary national boards of adjustment.* (Sec. 204)

Pending the establishment of a permanent National Air Transport Adjustment Board, air carriers and their employees are required to set up by agreement either a system, group, regional, or temporary national board of adjustment. The organization, procedure, powers and practices of these boards, not contrary to the other provisions of the Act, are all matters to be determined by agreement between a carrier or carriers and its or their employees.

The Act does not require that these adjustment boards be given the power of final decision; the agreement setting up any such board may provide that the decisions of the board shall be advisory only, either in certain types of cases or in all cases. Indeed, the jurisdiction of any such board may be limited to certain types of cases—the Act does not specify the *minimum* jurisdiction which such a board *must* have; it specifies only the *maximum* jurisdiction which it *may* have. *The scope of its jurisdiction and its powers are entirely a matter of agreement.*

These boards do not have jurisdiction over changes in rules or wages.

There is no provision in the Act for the enforcement of the awards of this type of adjustment board.

The Act provides no penalty for failure to establish an adjustment board. But see the discussion on the penalty provisions in part VIII of this memorandum.

B. *The National Air Transport Adjustment Board.* (Sec. 205)

The National Mediation Board is empowered by the Act to establish a National Air Transport Adjustment Board, when, in its judgment, such action is necessary "to provide for the prompt and orderly settlement of disputes." The powers of this Board if established will be along lines of the existing National Railroad Adjustment Board, and its awards will be enforceable in federal courts.

The establishment of a National Air Transport Adjustment Board will not automatically dissolve existing system, group, or regional boards. Those carriers and their employees wishing to

retain such boards may do so. However, should either party, at any time, after the creation of the National Air Transport Adjustment Board, become dissatisfied with any system, group or regional board, "that party, upon ninety days' notice to the other party, may elect to come under the jurisdiction of the National Air Transport Adjustment Board."

V. The National Mediation Board

(Sec. 4, 5, 203)

The National Mediation Board is composed of three members. It has a staff of mediators who assist in the execution of the Board's duties under the Act.

Government expenditures involved in the administration of the Act and reports required by the Act are taken care of through the National Mediation Board. *Otherwise the Board's function is restricted to handling the following three kinds of cases.*

1. Differences between carriers and employees, regarding *changes* in rates of pay, rules or working conditions not adjusted in conference.

2. Disputes among employees as to who shall be their duly designated and authorized representative.

3. Interpretation of agreements which were reached through mediation where controversy has arisen over the meaning or the application of such agreements.

These three classes of cases are known as "mediation cases," "representation cases" and "interpretation cases," respectively.

In addition, the National Mediation Board may take jurisdiction over any case where "any labor emergency is found by it to exist at any time." It is only in this circumstance that the Board might deal with grievances or disputes arising from the interpretation or application of agreements other than mediation agreements.[3]

3. We should note one possible qualification upon the broad statement made in the text. The Act provides that the services of the National Mediation Board may be invoked in the case of any dispute "not referable to an adjustment board . . . and not adjusted in conference between the parties, or where conferences are refused." Section 203(b). As we have indicated in Part IV of this memorandum, an agreement providing for an adjustment board *may* limit such a board's jurisdiction so that in the case of *some* disputes the adjustment board would have no power to entertain the matter. In such a case, it *may* be that the above quoted provision of the Act would authorize the invoking of the services of the National Mediation Board. Even so, however, its services could be mediatory alone.

In other words, the National Mediation Board has *limited* jurisdiction. It has no general power to mediate any or all disputes which may arise; it can act only in specific types of cases outlined in the Act. Nor has it any jurisdiction to review decisions of adjustment boards. Nor is it an enforcing or policing agency.

A. *Mediation cases.* As has been stated, the Mediation Board will assume jurisdiction over these cases, involving a change in rates of pay, rules of working conditions, "only where direct negotiations between the parties, diligently and conscientiously conducted, have exhausted all possibility of effecting agreement between them."

Either party to a dispute may, by request, invoke the services of the Board. The Act requires that "the said Board shall promptly put itself in communication with the parties to such controversy, and shall use its best efforts, by mediation, to bring them to agreement."

Should the Board fail to bring the parties together by mediation, the Act requires that it attempt to induce the parties to submit their controversy to arbitration in accordance with the provisions of the Act.

The National Mediation Board has no power to compel the parties to settle their dispute, either by an agreement, by arbitration, or otherwise, nor has it the power to impose a settlement. Nor is there any requirement that the National Mediation Board exhaust its mediatory efforts within any particular time.

When the National Mediation Board enters the picture it does so as a friend of both parties. Any member of the Board or any mediator assigned by the Board may conduct these mediation proceedings. The Board confers with the parties informally and has adopted no definite rules.

B. *Representation cases.* These cases arise from disputes "among a carrier's employees as to who are the representatives of such employees designated and authorized in accordance with the requirements of the Act."

Where such a dispute exists it is "the duty of the Mediation Board, upon request of either party to the dispute, to investigate such dispute." Under the Act, as interpreted by the Board, *an employer has no standing to request that an investigation of a representation dispute be made.*

In making investigations in representation disputes, the Mediation Board has the power "to make copies of the books and records of the carriers to obtain and utilize such information as may be deemed necessary by it."

The Board has no power to subpoena witnesses.

Where hearings have been held in representation cases, employers have ordinarily been invited to be present on the theory that they possess information which will be useful to the Board. The Board has considered them as witnesses only.

Representation, under the Act, is based on the majority of any class or craft. A representative does not have to be a labor organization; nor need it be an employee of the carrier.

Employees may change their representatives without affecting an existing labor agreement. *The agreement is with the employees and not with a union or other representative.* The representative is merely the agent of the employees.

C. *Interpretation cases.* The Act relative to these cases reads as follows:

> "In any case in which a controversy arises over the meaning or the application of any agreement *reached through mediation* under the provisions of this Act, either party to the said agreement, or both, may apply to the Mediation Board for an interpretation of the meaning or application of such agreement. The said Board shall upon receipt of such request notify the parties to the controversy, and after a hearing of both sides give its interpretation within thirty days." (Sec. 5, Second)

The effect on the Board's interpretation in these cases is *apparently advisory only.* And only where an agreement has been reached through mediation does the Board have any power to render interpretations.

VI. Arbitration (Sec. 7)

As we have said, if the National Mediation Board is unsuccessful in bringing about an amicable settlement of a dispute within its jurisdiction, the Act requires that a final effort be made by the Board to induce the parties to submit their dispute to arbitration. *The Board has no power to compel arbitration.* The parties may accept arbitration, or refuse to submit to arbitration, as they desire.

The provisions for arbitration under the Act are elaborate and detailed. *Extreme care* should be exercised in framing the question or questions to be submitted to arbitration.

Agreements to arbitrate must be in writing and filed with the National Mediation Board. They may provide for a board of either three or six. Arbitration awards are filed in the clerk's office of a federal district court designated in the agreements. Unless a petition for impeachment of an award is filed within ten days after the award is made, the court will enter judgment on the award.

VII. Emergency Boards (Sec. 10)

If (1) a dispute is not adjusted through direct negotiation or mediation and (2) the National Mediation Board fails to induce the parties to submit their controversy to arbitration and (3) such dispute in the judgment of the National Mediation Board "threatens substantially to interrupt interstate commerce to a degree such as to deprive any section of the country of essential transportation service," the National Mediation Board is required to notify the President of the situation. The President may thereupon, in his discretion, "create a board to investigate and report respecting such dispute."

Such a board must be created separately in each instance, and is to investigate the facts and make a report to the President within thirty days from the date of its creation. It can make no award; it simply makes a report which usually contains recommendations.

"After the creation of such board and for thirty days after such board has made its report to the President, no change, except by agreement, shall be made by the parties to the controversy in the conditions out of which the dispute arose." It is a misdemeanor for a *carrier* to fail to comply with this provision.

The purpose of these emergency boards is to place the facts before the public and to give the parties an additional period in which to "cool off" under the pressure of public opinion.

VIII. The Penalty Provisions of The Act

A. "The willful failure or refusal of any carrier, its officers, or agents to comply with" certain provisions of the Act[4] "shall be

4. In the preceding parts of this Memorandum we have in certain cases indicated that a violation of the Act is a misdemeanor. In those instances the penalty provision referred to in the text applies. In other cases, however, the Act does *not* provide that a violation is a misdemeanor—and in such other cases the penalty provision does *not* apply.

a misdemeanor, and upon conviction thereof the carrier, officer, or agent offending shall be subject to a fine of not less than $1,000 nor more than $20,000 or imprisonment for each offense, and each day during which such carrier, officer, or agent shall willfully fail or refuse to comply . . . shall constitute a separate offense." (Section 2, Tenth)

The *penalty* provisions of the Act are applicable *to carriers only* under the wording of the section quoted above. The duty to prosecute lies with "any district attorney of the United States" to whom any duly designated employee representative may apply. Costs of such actions are paid by the United States.

In the foregoing discussion we have indicated in the case of which duties a violation is a misdemeanor. None of the other duties is enforceable by the criminal law. However, the Supreme Court has held, in a case relative to the duty of a carrier to "treat with" the duly certified representative of the employees, that such duty created a legal obligation enforceable by a civil injunction suit by employees in a federal court despite the fact that the Act provided no penalty for a violation of that duty. *System Federation No. 40 v. The Virginia Railway Co.*, 300 U. S. 515 (1937). It is assumed that the other obligations of the Act may be enforced in the same way.

While the penalty provisions of the Act are applicable to carriers alone, there is nothing in the Act to prevent use of the civil injunction suit to compel *employees* to comply with the Act. It would appear that the reasoning of the *Virginia Railway* case would sustain an injunction suit by an employer against employees as well as *vice-versa.*

B. While the question is not free from doubt, the Civil Aeronautics Act of 1938 may impose an additional penalty upon air carriers for failure to comply with the provisions of Title II of the Railway Labor Act.

Section 401 (1) (4) of the Civil Aeronautics Act provides:

> "It shall be a condition upon the holding of a certificate by any air carrier that such carrier shall comply with Title II of the Railway Labor Act, as amended."

This provision is not limited to any specific obligations imposed by the Railway Labor Act.

Section 1002 (a) of the Civil Aeronautics Act provides that "any person may file with the Authority (Board) a complaint in writing *with respect to anything done or omitted to be done by any person in contravention of any provision of this Act,* or of any requirement established pursuant thereto."

Or the Civil Aeronautics Board may, under authority of section 1002 (b), make an investigation on its own initiative "as to any matter or thing" which may be complained of under the Civil Aeronautics Act "or relating to the enforcement of any of the provisions of" that Act.

And, under section 1002 (c), the Board may enter orders to compel compliance with the Civil Aeronautics Act or any requirement established pursuant thereto.

The Civil Aeronautics Board is further authorized under section 1007 (a) to seek enforcement of "any rule, regulation, requirement, or order," under the Civil Aeronautics Act, "or any term, *condition,* or limitation *of any certificate* or permit issued under" that Act, by applying to the appropriate United States district court, which "court shall have jurisdiction to enforce obedience thereto by a writ of injunction or other process, mandatory or otherwise."

The above remedies are all in addition to "the remedies now existing at common law or by statute." Section 1106.

The Civil Aeronautics Act also provides penalties which may likewise be applicable for a willful failure to comply with the Railway Labor Act. Thus Section 401 (h) provides that the Civil Aeronautics Board may "upon petition or complaint or upon its own initiative, after notice and hearing" *revoke* a certificate for intentional failure to comply with any *condition* of the certificate. And Section 902 (a) makes it a misdemeanor for any person knowingly and willfully to violate any condition of a certificate.

APPENDIX

The following form of notice has been prescribed by the National Mediation Board. *It must be posted in conspicuous places accessible to all employees by all employers subject to the Railway Labor Act.*

Form MB-1 (approved 8/4/34)

NOTICE IN RE RAILWAY LABOR ACT

(Approved May 20, 1926; amended June 21, 1934)

....

(Inserting name of posting carrier) (Place)

AUGUST 14, 1934.

To all employees:

1. *Handling of disputes.*—Pursuant to the provisions of section 2, eighth, Railway Labor Act, as amended (approved June 21, 1934), you are hereby advised that all disputes between.....

..... and its employees will be handled in accordance with the requirements of the Railway Labor Act.

2. *Contracts of employment.*—The following provisions of paragraphs third, fourth, and fifth, section 2, Railway Labor Act, are by law made a part of each contract of employment between this carrier and each of its employees, and shall be held binding regardless of any express or implied agreements to the contrary.

FREEDOM OF CHOICE OF REPRESENTATIVES OF EMPLOYEES

Section 2, third. Representatives, for the purposes of this act, shall be designated by the respective parties without interference, influence, or coercion by either party over the designation of representatives by the other; and neither party shall in any way interfere with, influence, or coerce the other in its choice of representatives. Representatives of employees for the purposes of this act need not be persons in the employ of the carrier, and no carrier shall, by interference, influence, or coercion seek in any manner to prevent the designation by its employees as their representatives of those who or which are not employees of the carrier.

CARRIERS FORBIDDEN TO INTERFERE IN LABOR ORGANIZATION

Section 2, fourth. Employees shall have the right to organize and bargain collectively through representatives of their own choosing. The majority of any craft or class of employees shall have the right to determine who shall be the representative of the craft or

class for the purposes of this act. No carrier, its officers, or agents, shall deny or in any way question the right of its employees to join, organize, or assist in organizing the labor organization of their choice, and it shall be unlawful for any carrier to interfere in any way with the organization of its employees, or to use the funds of the carrier in maintaining or assisting or contributing to any labor organization, labor representative, or other agency of collective bargaining, or in performing any work therefor, or to influence or coerce employees in an effort to induce them to join or remain or not to join or remain members of any labor organization, or to deduct from the wages of employees any dues, fees, assessments, or other contributions payable to labor organizations, or to collect or to assist in the collection of any such dues, fees, assessments, or other contributions: *Provided,* That nothing in this act shall be construed to prohibit a carrier from permitting an employee, individually, or local representatives of employees from conferring with management during working hours without loss of time, or to prohibit a carrier from furnishing free transportation to its employees while engaged in the business of a labor organization.

FREEDOM TO JOIN LABOR ORGANIZATION OF EMPLOYEE'S CHOICE

Section 2, fifth. No carrier, its officers or agents shall require any person seeking employment to sign any contract or agreement promising to join or not to join a labor organization; and if any such contract has been enforced prior to the effective date of this act, then such carrier shall notify the employees by an appropriate order that such contract has been discarded and is no longer binding on them in any way.

3 *Instructions to officers.*—All officers of this carrier whose duties are affected by the foregoing are advised to take notice of and to comply with the provisions thereof.

.....President

(Insert original or facsimile signature of president)

WHAT IS A FEEDER AIRLINE?

By John H. Frederick and William J. Hudson*

The concept of feeder airline is not new. It is as old as commercial aviation[1] which began in 1925, but only since 1938 have its proponents given real expression to their ideas. The term, "feeder airline," has lacked *specific* definition among those interested in this type of air transport service because there has been no clear differentiation between the character of this type of operation and the usual or conventional trunk-line operation. What had been, for the most part, a speculative interest in the development of feeder airlines began to crystalize in 1938 into action on the part of small communities through their chambers of commerce, local governments, and aviation enthusiasts to secure regular air service for their communities. Feeder airlines were to be removed from the realm of fancy into the world of reality, and the determination of groups interested in the "feeder movement" were manifested in political pressure as well as public ceremonies.

On May 19, 1938, Air Mail Pick-up Day, volunteer pilots flew mail from thousands of communities not directly served by air mail. This was expected to result in considerable pressure by Congressmen and Senators to get regular service for those communities in their districts without such service at that time.[2] The National Airmail Feeder Conference at Kansas City in 1938 adopted a resolution requesting that all candidates for election to Congress support a conservative and business-like expansion of feeder service as part of the national air mail service.

Among the recommendations of the Southwestern Aviation Conference of June, 1940, was one to petition Senators and Representatives requesting their backing of new feeder lines for their sections of the country.[3] On many occasions community representatives have testified before the Civil Aeronautics Board in certificate of convenience and necessity cases involving trunk-line operations,

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1. See articles in *The Dallas Morning News,* September 5, 1925, p. 4; November 25, 1925, p. 7; and May 15, 1926, p. 4; also, *Annual Report of the Postmaster General,* June 30, 1926, p. 28.
2. "Air Mail Week is Celebrated," *Aero Digest,* June, 1938, p. 11.
3. "Southwest Aviation Conference," *Aviation,* June, 1940, p. 69.

as to the need for feeder airline service to connect their communities with the trunk lines.[4] Some communities have gone so far as to express a willingness to invest capital in an air transport system which would accomplish this purpose.

Whether these now vocal pressure groups have been motivated by community-interest, self-interest, or a conscious desire to see our air transport system expanded into a well integrated transportation network may in some instances be questioned. But it is apparent that these forces are gaining momentum, and some method must soon be devised to answer the growing demand for a greatly expanded, well integrated air transport system providing most communities of the nation a connecting link with the trunk lines. Equally obvious is the fact that the extension of airlines and air routes to small communities will present technical and administrative problems quite different from and, in some instances, more difficult than those encountered in the operation of our present trunk lines. Just what type of air transport service is contemplated by these lines for our small communities? Until recently everyone talked about feeder airlines, but no one seemed to know exactly what they were or how they were to operate.

The type of air service which will connect small centers of population with the primary or trunk lines of the country has been referred to by various names. It has been called at times an auxiliary air route; at other times a feeder line. By some it is spoken of as a belt line; by others a branch line. And occasionally, it is referred to as a supplementary air route. It is only natural, therefore, that there is much confusion as to the type of service contemplated or implied by each term.

There is a growing tendency to use the terms "airline" and "air system" synonymously though "air system" would properly identify the air transport network as a whole. The term "air system" will be used in the latter sense throughout this study. The term "airline" or "air carrier" will be used to mean any person who undertakes to furnish common carrier transport services either as a feeder or trunk line operator as a part of the air transport system of the country. "Air route" will be used to mean any specific area and the stations or terminals included therein which is a subdivision for operations purposes of a feeder or trunk line.

4. For several recent cases see *The City of Fort Stockton and the County of Pecos, Texas*, C.A.B. Docket No. 504; *The City of Alpine, Texas*, C.A.B. Docket No. 508; and *The City of Brownwood, Texas*, C.A.B. Docket No. 509, examiner's report served August 21, 1941. Also, *Service to Elizabeth City*, C.A.B. Docket No. 619, examiner's report served September 26, 1941.

Using the foregoing definitions as the basis, several proposed definitions of a feeder airline may be examined to illustrate the confusion created when words, each having a different meaning, are used to describe a similar operation.

In a speech at the National Airmail Feeder Conference at Kansas City in October, 1938, B. E. Cole, then President of Airlines Charter Service, said, "The term Feeder Air Route shall mean any air route on which the average distance between terminals is 75 miles or less, excepting routes in operation and carrying air mail on January 1, 1939."[5] At best this definition of feeder routes merely sets the date on which they shall begin to exist. By this definition short-haul routes of the trunk lines, which might be classified as feeder routes, would be precluded from that category while "any route on which the average distance between terminals is 75 miles or less" that might come into existence after January 1, 1939, would automatically be termed a feeder route. The net effect would be to guarantee the status of present trunk-line operations.

When we examine this definition further we find that the limitation of average distance between terminal points to 75 miles is vague in that, while it attempts to delimit the operating area for a feeder route, the manner of statement is ambiguous. Unless "average distance between terminals" may be understood to mean that operations should be limited to an average distance of 75 miles between a base terminal and any other terminal point, there is no reason why under this definition a feeder route might not be extended *ad infinitum*. The question is raised, therefore, as to what is meant by the term "route." Does it mean the entire operating area of the feeder airline, or does it refer to a single operating division of the feeder airline as a whole?

Airline Feeder System, Inc., which operated in 1937 and 1938 and which failed to obtain a certificate of convenience and necessity under the Grandfather Clause of the Civil Aeronautics Act of 1938,[6] defined a feeder system as one "which will operate within an approximate radius of 200 miles of any given airline terminal to give the cities within that radius mail, passenger, and property service."[7] While this definition still leaves many questions regarding the char-

5. *Aero Digest*, November, 1938, p. 18.

6. *Airline Feeder System, Inc.*, C.A.B. Docket No. 57, decided June 9, 1939.

7. "A Statement of Policy," *American Aviation*, December 15, 1938, p. 12. Two other types of feeder airlines are mentioned. "The second is the type known as the Star Route, which can generally be defined as the rural free delivery of the air mail routes to communities highly inaccessible by ground transportation. The third is the type of service . . . consisting of an automatic pickup and delivery device." These are special operating problems, and will be discussed subsequently as such.

acteristics of a feeder airline unanswered, it does have the merit of stating specifically the kinds of service to be offered as a common carrier.

A similar attempt is made here to limit the physical area over which a feeder airline may operate. But is the geographical area to be covered the only characteristic by which feeder operations may be distinguished from primary or trunk-line operations? It is difficult to visualize exactly what is meant by "system." Probably the authors use the term to describe the operating limitations for a feeder airline as a whole. Possibly they attempt to delimit the physical area to be covered by a single feeder route. Whatever the assumption may be, we can not remove the uncertainty as to which point of view to accept unless we come to some common agreement as to what term shall be used.

Less rigid in definition are the following interpretations of a feeder airline. "A feeder line is a line which connects communities off the main line, with the mainline, and by so doing feeds into the major artery the mail, express and passengers that originate in the hinterland or outlying regions."[8] A feeder service is "a short air route operation which gives airmail, passenger and express service, or airmail and express service, to cities and towns not now enjoying scheduled trunk line service by a domestic carrier."[9]

Aside from the uncertainty of terms used in defining a feeder airline, the two definitions first discussed may be criticized for their rigid limitation of the scope of feeder airline operations. The latter definitions, while they do not place such limitations on a feeder airline, are weakened by their generality. Whether or not the type of air service performed is of the nature of feeder or trunk-line operations would not be determined on the basis of long or short-haul necessarily, though that is a factor to be considered. Nor is the fact that a city or town is or is not served by an airline a logical criteria for determining the type of service offered. This point is almost certain to be a future problem for the air transport industry and Civil Aeronautics Board to decide. The same questions are raised in these two definitions as to what the authors intend by the term "airline" on the one hand and "air route" on the other. Their meaning cannot be reconciled if we accept for our basis the definitions offered at the beginning of this discussion.

8. "Feeders," Robert J. Pritchard, *Western Flying*, August, 1939, p. 20.
9. "Feeder Airlines," Keith Kahle, *Oklahoma*, February 20, 1941, p. 9.

Since none of the definitions so far stated presents, in itself, an adequate explanation of what a feeder airline is, the nature of feeder airline operations might well be compared with those of a trunk line. Any differences provide the starting point for a definition that is specific, yet adequate.

1. The trunk line air carriers in the United States operate over routes connecting principally the larger cities of the country. Their basic function is to provide for the rapid movement of passengers, mail, and express between centers of large population. From the nature of their services they perform essentially a transfer function. Feeder airlines too, should be designed to perform a similar function between centers of small population within an area and between small communities and the larger population centers which usually are terminal points located on the trunk lines. The major point of distinction is that though a preponderance of trunk line traffic originates at the terminal point, a considerable portion of traffic destined for air carriage is delivered to the terminal points by other modes of transportation. Practically all traffic originated by a feeder airline will come from its intermediate pick-up points.

2. The outstanding characteristic of feeder airlines is the part they will play in the concentration and distribution of goods and services in the areas they serve. Not only will a feeder airline move traffic from one point to another as is the principal function of a trunk line, but it will gather mail, express, and passengers from a large number of small scattered trading areas and feed them into a few terminal points. The converse of this concentration function occurs when a feeder airline carries traffic from points of concentration, terminal points, and distributes it among smaller scattered communities. Whereas a trunk line concentrates traffic at a relatively few terminal points, a feeder airline will tend to permit a greater concentration of traffic at one end of the line and a greater dispersion of traffic at the other end. The economic and social significance of these two functions can not be overemphasized. For while our present air transport system has played an important part in speeding up communications and affording greater mobility between areas of concentrated population, the advantages of this new mode of transportation have been felt but indirectly by the more sparsely settled sections of the nation and has sometimes placed them at a disadvantage.

3. It is apparent that because of the large number of communities that will be served by a feeder airline, the distance be-

tween stops will be short, a natural circumstance of the type of service offered. On the other hand, the distance between terminal points and intermediate stops on a trunk line is quite long since no attempt is made by the trunk lines to serve intermediate points except incidentally for such purposes as refueling or some other requirement beyond the airline's control. This long-haul and short-haul factor makes for a definite cleavage in trunk line and feeder line operations as to the number of stops, size of equipment, capital investment, and other operating considerations.

4. Closely related to the length of haul factor is the frequency of stops at points served. The number of scheduled flights between terminal points on a trunk line are dictated first, by the postal requirements of the largest point served; second, by the volume of other traffic originating at the terminal points; and third, by the necessity for making connections with other trunk line operators. The extent to which a feeder airline will be governed by any one or all of these factors is a problem as yet unanswered. But more than likely feeder airline schedules for some time to come will not exceed the minimum scheduled mail flights prescribed by the Post Office Department for a given route.

In order to feed traffic into terminal points coincident with trunk line schedules, the area which can be served by any one feeder route is limited by the time required to serve its route and get to a terminal between the scheduled stops, at that point, of the trunk line.

5. Another important difference between feeder and trunk line operations is the type of equipment used. Due to the frequent number of short-flight stops at intermediate points or feeder airline stations and the character of airport facilities at these small points, feeder lines will require planes smaller in size than those used by trunk line operators. The factor of carrying capacity alone precludes the use of the smaller planes for regular trunk line service.

6. Characteristic of feeder airlines as compared with trunk lines will probably be a higher operating cost per revenue mile flown, due to short-haul operations. But fixed costs should be lower than those of trunk lines due to smaller and less elaborate equipment.

7. Perhaps of equal importance as operating and organization differences between a feeder and trunk airline is the marketing significance of such services. While an explanation of this factor is

suggested in 1 and 2 above, the economic implications of feeder airlines is so great as to merit considering this factor in a separate category.

A glance at the airway map of the United States will show that present terminal points are located predominantly within a given marketing area. Terminal points such as St. Louis, Chicago, Boston, and Dallas, to name but a few, are the concentration points of economic activity in their respective marketing areas. The prime advantage of a feeder airline, therefore, will be to facilitate a more rapid concentration and dispersion of traffic within the economic orbit of each. Moreover, in determining whether or not a given service is feeder in character, consideration must be given to the degree to which this dual function is performed as distinguished from the primary function of transferance of traffic. The traffic generating power for the market in which it is located will be a major factor in determining the character of service a community will receive.

From the foregoing comparison of some of the operating characteristics of feeder and trunk line services, we may conclude that:

A feeder airline is (1) a common carrier (2) performing the dual function of concentrating and dispersing mail, passengers, and/or property (3) within a given marketing area (4) from widely scattered points (5) to a few terminal points.

This definition has purposely avoided limiting the scope of a feeder airline by any preconceived notion as to what shall be the size of the area served; whether a community is or is not at present served by an airline; or if the distance between stops shall be a minimum, a maximum or an average of so many miles. It would seem that these are matters of operating policy and should be determined principally by the economic factors governing each case instead of by definition. In the final analysis the definition of a feeder airline and its distinction from trunk line service will be influenced also by the public policy determined by the regulating authority.

STATE

WORKING MEMORANDUM ON INTERMUNICIPAL AIRPORT COOPERATION

Emil F. Jarz*

LEGISLATION: RECOMMENDATIONS

1. *Intermunicipal cooperation (functional consolidation) vs. aviation districts.*
   Indications are that under ordinary circumstances "direct" cooperation among municipalities is preferable to the creation of independent ad hoc districts. Reference to my article in the *Journal of Air Law and Commerce* (Vol. 12, p. 301) October, 1941, shows 32 states authorizing the former type of airport arrangement. There are, however, at least 4 states authorizing the creation of airport districts in the form of independent political subdivisions.[1]

2. *General vs. specific legislation for intermunicipal cooperation*
   A single general law establishing a clear-cut and uniform procedure for intermunicipal cooperation in all municipal services has certain advantages over individual acts authorizing such efforts in particular services like airports, fire, police, etc. (See, for example, New York Laws 1937, Ch. 862, S614; Tennessee P. L. 1939, Chs. 222, 223; and Wisconsin Laws 1939, Ch. 210.)

3. A good precedent in legislation for airport cooperation in particular is found in the Uniform Airports Act (6 *Journal of Air Law* 589) adopted by the National Conference of Commissioners on Uniform Laws and the American Bar Association at Los Angeles in July of 1935.[2]

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* Research Assistant in Public Administration, University of Chicago, and in charge of nationwide study of intermunicipal arrangements sponsored by the International City Managers' Association and the University of Chicago. These recommendations and notes on intermunicipal cooperation in airport matters were prepared for consideration at the conference of New Jersey, New York and Rhode Island governors.

1. See Illinois law 1941, S. B. No. 372; Mass. Laws Ann. (1940) Comm. Suppl. c. 90, S51 (1939, c. 393, S3); Gen. Law of California (Deering) 1937, Act 150 (Stats. 1929, Ch. 847) Calif. Laws 1941, Ch. 52; and Florida Laws 1939, c. 19642, No. 647. In general, special districts are to be discouraged as an unnecessary burden on the electorate. In particular, moreover, two of the airport district acts cited are defective. The Illinois law permits the creation of a joint airport district by "contiguous" municipalities only. The Massachusetts act may be interpreted in such a way as to preclude the establishment of an airport district coextensive with the area served by the airport. Furthermore, it is such a bare authorization that it is virtually unworkable. In contrast, the California law of 1929 sets forth in considerable detail both the organization and powers of the airport district. The 1941 enactment applies specifically to the Monterey Peninsula. After a quick review of this latter special act, I was unable to see that it added any powers not granted by the general airport district law of 1929. The purpose of the Florida statute is to promote federal-local cooperation with only incidental application to the establishment of airport districts. Until recently, no special airport districts had been set up under any of the authorizati' s. It may be that the Monterey project in California is now under way.

2. The Uniform Airports law has been adopted in several states. See, for example, Florida Laws 1937, Ch. 17708; Georgia Laws 1933, p. 102 (the Uniform Law as it appeared in first draft); South Carolina laws 1937, p. 466; and Utah Laws 1937, Ch. 9—all listed in Table II of my airport article. Some of these states modified the act in several particulars. For a discussion of these modifications see 11 *Uniform Laws Annotated* 191.

a. Commendable features of the Uniform Airports Act.

1) *Broad Jurisdictional Grant.* "Municipalities, counties, *and other* political subdivisions" are authorized to cooperate. The New York and New Jersey laws do not specifically include counties. See Table II in my article.

2) *No Geographical Limitations on Municipalities.* The words "contiguous" or "adjacent" frequently included in state laws authorizing intermunicipal cooperation are not present in the Uniform Airport Acts. A limitation upon joint efforts to "contiguous" political subdivisions may prove especially serious in airport cooperation since the boundaries of the participating municipalities do not ordinarily meet. For a discussion of this point see my letter to Mr. David Davis, Jr., who testified before the Illinois Senate Military Affairs Committee in its deliberations upon Senate Bill No. 372, the 1941 law authorizing the creation of airport districts. I might add that neither the New Jersey nor New York Laws include this limitation.

The Uniform Law also provides for the location of airports beyond municipal boundaries. A power of this type may appear elementary but is not to be taken for granted. See footnote no. 56 in my article, *Ibid.*, citing cases upholding the location of airports outside of municipal limits.

3) *Liberal Financial Provision.* Taxation, bond issues and other sources of monies are provided. See p. 315 of my article, *Ibid.*, describing how the Arkansas Supreme Court remedied the omission of such a provision from Arkansas Laws 1939, Act 80, pp. 168-69. You may have noticed, too, that the New Jersey law summarized in Table II limits the source of monies to bond issues.

4) *Authority is granted to police airports beyond city limits.* Such powers again should not be taken for granted. See Ebrite v. Crawford, 215 Cal. 724 upholding policing beyond city limits and Proceedings of the National Conference of Commissioners on Uniform State Laws in Footnote no. 56 of my article, *Ibid.*

b. Possible improvements to the Uniform Airports act.

1) Extend to municipalities of one state the right to cooperate with those of another. This may be a very useful provision in our eastern seaboard states where municipalities are virtually contiguous to each other. For an example of such a provision see the citation from the Georgia law in footnote 49 of my article, *Ibid.*[3]

2) Eliminate the requirement that *counties* be "adjacent" or "contiguous." A court may interpret "contiguous" in such a way as to require that all municipalities (if there are more than two) be adjacent at some point. This may mean that two counties con-

3. To date, the interstate "compact clause" of the U. S. Constitution has not been invoked to enjoin any of the many intermunicipal projects sponsored by municipalities on opposite sides of state lines. If the issue should arise one might argue that a law of this type enacted without simultaneous and parallel action by the neighboring state is not a "compact" in the strict sense of the term.

nected by a third would be unable to join with the latter in an airport project. See the *Lower Indian Creek Drainage and Levee District,* case 343, Illinois 49.

3) Extend to employees of a joint project beyond municipal boundaries the right of compensation for injury or death.

4) Clarify the financial responsibility of the individual municipality if bonds or other form of indebtedness are incurred in creating joint airport projects.

Comment:

I have certain reservations towards both recommendations numbers 3 and 4. The fact is that questions of this type have not arisen as yet in the establishment, maintenance, or operation of joint airports. Moreover, my legal research covering such problems in other fields of intermunicipal cooperation such as fire, police, water, and sewage is not completed. I might point out, however, that the New Jersey airport law (see Table II, *Ibid.*) provides that municipalities are *individually* responsible for financial obligations incurred in the establishment of a joint airport. In light of the fact that municipalities cannot be "joint owners" in the strict sense of the term (see footnote 60, *Ibid.*) this may be a wise provision. I omit recommendations upon municipal joint liability for tort, since airport projects are now generally considered within the protective cloak of "public and governmental purpose" and are likely to be free of such responsibilities.

Procedural and Administrative Practice: Recommendations

1. Obligations of each party to be in writing.

2. Methods of amendment, and termination (including duration of arrangement and property disposal) to be incorporated in agreements.

3. Costs to be allocated on some other basis than the customary "equal sharing" (see methods based on population and assessed property valuation used by Johnson City and three other municipalities in Tennessee [p. 305, *Ibid.*] and Helena-West Helena, Arkansas airport [p. 311, *Ibid.*]).

MISCELLANEOUS NOTES

1. The airport owned and operated by Binghamton and the Village of Endicott is the only joint airport in New York State. Representative Armstrong of Schenectady was the sponsor of the 1941 law and may have information on recent developments.

2. New Jersey has an enabling law but is without a single joint airport. This finding was a surprise in light of the many examples of intermunicipal cooperation in other municipal services, especially in the northeastern part of the state.

   In a recent letter, the state director of aeronautics expressed his appreciation of the possibilities of intermunicipal cooperation in airport defense and added his regrets since nothing had been done in the state.

3. Rhode Island has no enabling law. There are no joint airports in the state.

ILLINOIS MODEL AIRPLANE ZONING ACT.

A BILL

For an Act to empower and direct the Illinois Aeronautics Commission to prepare airport approach plans for publicly-owned airports; to empower and direct municipalities and other political subdivisions to promulgate, administer, and enforce airport zoning regulations limiting the height of structures and objects of natural growth, and otherwise regulating the use of property, in the vicinity of such airports; to authorize the acquisition, by purchase, grant, or condemnation, of air rights and other interests in land; and to provide penalties and remedies for violations of this act or of any ordinance, resolution or regulation made under the authority conferred thereby.

Be it enacted by the People of the State of Illinois, represented in the General Assembly:

Section 1. DEFINITIONS. As used in this Act, unless the context otherwise requires:

(1) "Airport" means any area of land or water designed for the landing and taking-off of aircraft and utilized or to be utilized by the public as a point of arrival or departure by air.

(2) "Airport hazard" means any overhead power line which interferes with radio communication between a publicly-owned airport and aircraft approaching or leaving same, or any structure or tree which obstructs the aerial approaches of such an airport or is otherwise hazardous to its use for landing or taking-off.

(3) An airport is "publicly-owned" if the portion thereof used for the landing and taking-off of aircraft is owned by a governmental body, political subdivision, public agency, or other public corporation.

(4) "Commission" means the Illinois Aeronautics Commission.

(5) "Person" means any individual, firm, co-partnership, corporation, company, association, joint stock association or body politic, and includes any trustee, receiver, assignee, or other similar representative thereof.

(6) "Structure" means any object constructed or installed by man, including, but without limitation, buildings, towers, smokestacks, and overhead transmission lines.

(7) "Tree" means any object of natural growth.

Sec. 2. AIRPORT HAZARDS NOT IN PUBLIC INTEREST. It is hereby found and declared that an airport hazard endangers the lives and property of users of the airport and of occupants of land in its vicinity, and also, if of the obstruction type, in effect reduces the size of the area available for the landing, taking-off and maneuvering of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein, and is therefore not in the interest of the public health, public safety, or general welfare.

Sec. 3. PREPARATION OF AIRPORT APPROACH PLANS. The Commission shall formulate and adopt, and from time to time as may be necessary revise, an airport approach plan for each publicly-owned airport in the State. Each such plan shall indicate the circumstances in which structures and trees are or would be airport hazards, the area within which measures for the protection of the airport's aerial approaches should be taken, and what the height limits and other objectives of such measures should be. In adopting or revising any such plan, the Commission shall consider, among other things, the character of the flying operations expected to be conducted at the airport, the nature of the terrain, the height of existing structures and trees above the level of the airport, and the possibility of lowering or removing existing obstructions, and the Commission may obtain and consider the views of the agency of the Federal Government charged with the fostering of civil aeronautics, as to the aerial approaches necessary to safe flying operations at the airport.

Sec. 4. ADOPTION OF AIRPORT ZONING REGULATIONS.

(1) Every municipality and county or other political subdivision having within its territorial limits an area within which, according to an airport approach plan adopted by the Commission, measures should be taken for the protection of airport approaches, shall adopt, administer, and enforce, under the police power and in the manner and upon the conditions hereinafter prescribed, airport zoning regulations applicable to such area, which regulations shall divide the area into zones, and, within such zones, specify the land uses permitted, regulate and restrict the height to which structures and trees may be erected or allowed to grow, and impose such other restrictions and requirements as may be necessary to effectuate the Commission's approach plan for the airport.

(2) In the event that a political subdivision has adopted, or hereafter adopts, a general zoning ordinance regulating, among other things, the height of buildings, any airport zoning regulations adopted for the same area or portion thereof under this Act, may be incorporated in and made a part of such general zoning regulations, and be administered and enforced in connection therewith, but such general zoning regulations shall not limit the effectiveness or scope of the regulations adopted under this Act.

(3) Any zoning or other regulations applicable to any area within which, according to an airport approach plan adopted by the Commission, measures should be taken for the protection of airport approaches, including not only any airport zoning regulations adopted under this Act but any zoning or other regulations dealing with the same or similar matters, that have been or may be adopted under authority other than that conferred by this Act, shall be consistent with, and conform to, the Commission's approach plan for such area, and shall be amended from time to time as may be necessary to conform to any revision of the plan that may be made by the Commission.

(4) All airport zoning regulations adopted under this Act shall be reasonable, and none shall require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations when adopted or amended, or otherwise interfere with the continuance of any non-conforming use, except as provided in Section 5 (1).

Sec. 5. PERMITS AND VARIANCES.

(1) *Permits.* Where advisable to facilitate the enforcement of zoning regulations adopted pursuant to this Act, a system may be established for granting permits to establish or construct new structures and other uses and to replace existing structures and other uses or make substantial changes therein or substantial repairs thereof. In any event, before any non-conforming structure or tree may be replaced, substantially altered or repaired, rebuilt, allowed to grow higher, or replanted, a permit must be secured from the administrative agency authorized to administer and enforce the regulations, authorizing such replacement, change or repair. No such permit shall be granted that would allow the structure or tree in question to be made higher or become a greater hazard to air navigation than it was when the applicable regulation was adopted; and whenever the administrative agency determines that a non-conforming structure or tree has been abandoned or more than 80 per cent torn down, destroyed, deteriorated, or decayed: (a) no permit shall be granted that would allow said structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations; and (b) whether application is made for a permit under this paragraph or not, the said agency may by appropriate action compel the owner of the non-conforming structure or tree, at his own expense, to lower, remove, reconstruct, or equip such object as may be necessary to conform to the regulations or, if the owner of the non-conforming structure or tree shall neglect or refuse to comply with such order for 10 days after notice thereof, the said agency may proceed to have the object so lowered, removed, reconstructed, or equipped and assess the cost and expense thereof upon the object or the land whereon it is or was located. Unless such an assessment is paid within 90 days from the service of notice thereof on the agent or owner of such object or land, the sum shall bear interest at the rate of 10 percent per annum until paid, and shall be collected in the same manner as are general taxes. Except as indicated, all applications for permits for replacement, change or repair of non-conforming uses shall be granted.

(2) *Variances.* Any person desiring to erect any structure, or increase the height of any structure, or permit the growth of any tree, or otherwise use his property, in violation of airport zoning regulations adopted under this Act, may apply to the Board of Appeals, as provided in Section 6 (3), for a variance from the zoning regulations in question. Such variances shall be allowed where a literal application or enforcement of the regulations would result in practical difficulty or unnecessary hardship and the relief granted would not be contrary to the public interest but do substantial justice and be in accordance with the spirit of the regulations.

(3) *Obstruction marking and lighting.* In granting any permit or variance under this Section, the administrative agency or Board of Appeals may, if it deems such action advisable to effectuate the purposes of this Act and reasonable in the circumstances, so condition such permit or variance as to require the owner of the structure or tree in question to permit the political subdivision, at its own expense, to install, operate, and maintain suitable obstruction markers and obstruction lights thereon.

Sec. 6. PROCEDURE.

(1) *Adoption of zoning regulations.* No airport zoning regulations shall be adopted, amended, or changed under this Act except by action of the legislative body of the political subdivision in question, after a public hearing in relation thereto, at which parties in interest and citizen shall have an opportunity to be heard. At least 15 days' notice of the hearing shall be published in an official paper, or a paper of general circulation, in the political subdivision.

(2) *Administration of zoning regulations—Administrative agency.* The legislative body of any political subdivision adopting airport zoning regulations under this Act may delegate the duty of administering and enforcing such regulations to any administrative agency under its jurisdiction, but such administrative agency shall not be or include any member of the Board of Appeals. The duties of such administrative agency shall include that of hearing and deciding all permits under Section 5 (1), but such agency shall not have or exercise any of the powers delegated to the Board of Appeals.

(3) *Administration of airport zoning regulations—Board of appeals.* Airport zoning regulations adopted under this Act shall provide for appointment of a Board of Appeals to have and exercise the following powers:

(a) To hear and decide appeals from any order, requirement, decision, or determination made by the administrative agency in the enforcement of this Act or of any ordinance adopted pursuant thereto;

(b) To hear and decide special exceptions to the terms of the ordinance upon which such Board may be required to pass under such ordinance;

(c) To hear and decide specific variances under Section 5 (2).

Where a zoning board of appeals already exists, it may be appointed as the Board of Appeals. Otherwise, the Board of Appeals shall consist of five members, each to be appointed for a term of three years and until their successors are appointed and qualified, and to be removable for cause by the appointing authority upon written charges and after public hearing.

The Board shall adopt rules in accordance with the provisions of any ordinance or resolution adopted under this Act. Meetings of the Board shall be held at the call of the chairman and at such other times as the Board may determine. The chairman, or in his absence the acting chairman, may administer oaths and compel the attendance of witnesses. All meetings of the Board shall be public. The Board shall keep minutes of its proceedings, showing the vote of each member upon each question, or, if absent or failing to vote, indicating such fact, and shall keep records of its examinations and other official actions, all of which shall immediately be filed in the office of the Board and shall be a public record.

Appeals to the Board may be taken by any person aggrieved, or by any officer, department, board, or bureau of the political subdivision affected, by any decision of the administrative agency. An appeal must be taken within a reasonable time, as provided by the rules of the Board, by filing with the agency from which the appeal is taken and with the Board, a notice of appeal specifying the grounds thereof. The agency from which the appeal is taken

shall forthwith transmit to the Board all the papers constituting the record upon which the action appealed from was taken.

An appeal shall stay all proceedings in furtherance of the action appealed from, unless the agency from which the appeal is taken certifies to the Board, after the notice of appeal has been filed with it, that by reason of the facts stated in the certificate a stay would, in its opinion, cause imminent peril to life or property. In such case proceedings shall not be stayed otherwise than by a restraining order which may be granted by the Board or by a court of record on application on notice to the agency from which the appeal is taken and on due cause shown.

The Board shall fix a reasonable time for the hearing of the appeal, give public notice and due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing any party may appear in person or by agent or by attorney.

The Board may, in conformity with the provisions of this Act, reverse or affirm, wholly or partly, or modify, the order, requirement, decision, or determination appealed from and may make such order, requirement, decision, or determination as ought to be made, and to that end shall have all the powers of the administrative agency from which the appeal is taken.

The concurring vote of a majority of the members of the Board shall be sufficient to reverse any order, requirement, decision, or determination of the administrative agency, or to decide in favor of the applicant on any matter upon which it is required to pass under any such ordinance, or to effect any variation in such ordinance.

Sec. 7. JUDICIAL REVIEW.

(1) Any person aggrieved by any decision of the Board of Appeals, or any taxpayer, or any officer, department, board, or bureau of the political subdivision, may present to the circuit court a verified petition setting forth that the decision is illegal, in whole or in part, and specifying the grounds of the illegality. Such petition shall be presented to the court within 30 days after the decision is filed in the office of the Board.

(2) Upon presentation of such petition the court may allow a writ of certiorari directed to the Board of Appeals to review such decision of the Board. The allowance of the writ shall not stay proceedings upon the decision appealed from, but the court may, on application, on notice to the Board and on due cause shown, grant a restraining order.

(3) The Board of Appeals shall not be required to return the original papers acted upon by it, but it shall be sufficient to return certified or sworn copies thereof or of such portions thereof as may be called for by the writ. The return shall concisely set forth such other facts as may be pertinent and material to show the grounds of the decision appealed from and shall be verified.

(4) The court shall have exclusive jurisdiction to affirm, modify, or set aside the decision brought up for review, in whole or in part, and if need be, to order further proceedings by the Board of Appeals. The findings

of fact by the Board, if supported by substantial evidence, shall be accepted by the court as conclusive, and no objection to a decision of the Board shall be considered by the court unless such objection shall have been urged before the Board, or, if it was not so urged, unless there were reasonable grounds for failure to do so.

(5) Costs shall not be allowed against the Board of Appeals unless it appears to the court that it acted with gross negligence, in bad faith, or with malice, in making the decision appealed from.

Sec. 8. ENFORCEMENT AND REMEDIES. Each violation of this Act or of any regulations, order, or ruling promulgated or made pursuant to this Act, shall constitute a misdemeanor and shall be punishable by a fine of not more than $100 or imprisonment for not more than 30 days or by both such fine and imprisonment, and each day a violation continues to exist shall constitute a separate offense. In addition, either the political subdivision within which the property is located or the Commission may institute in any court of competent jurisdiction, an action to prevent, restrain, correct or abate any violation of this Act, or of airport zoning regulations adopted under this Act, or of any order or ruling made in connection with their administration or enforcement, and the court shall adjudge to the plaintiff such relief, by way of injunction (which may be mandatory) or otherwise, as may be proper under all the facts and circumstances of the case, in order fully to effectuate the purposes of this Act and of the regulations adopted and orders and rulings made pursuant thereto.

Sec. 9. ACQUISITION OF AIR RIGHTS. In any case in which: (1) it is desired to remove, lower, or otherwise terminate a non-conforming use; or (2) the approach protection necessary according to the Commission's airport approach plan cannot, because of constitutional limitations, be provided by airport zoning regulations under this Act; or (3) it appears advisable that the necessary approach protection be provided by acquisition of property rights rather than by airport zoning regulations, the political subdivision within which the property or non-conforming use is located, the political subdivision owning the airport or served by it, or the Commission, may acquire, by purchase, grant, or condemnation in the manner provided by the law under which political subdivisions are authorized to acquire real property for public purposes, such an air right, easement, or other estate or interest in the property or non-conforming use in question as may be necessary to effectuate the purposes of this Act.

Sec. 10. SEVERABILITY. If any provision of this Act or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the Act which can be given effect without the invalid provision or application, and to this end the provisions of this Act are declared to be severable.

Sec. 11. SHORT TITLE. This Act shall be known and may be cited as the "Model Airport Zoning Act."

Sec. 12. REPEAL. All acts or parts of acts which are inconsistent with the provisions of this Act are hereby repealed.

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Northwest Region—A. A. Bennett, Director of Aeronautics
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State House
Boise, Idaho

Following were appointed to represent the Association on the Joint Federal-State Jurisdictional Committee:

Earl Johnson, Ohio

Al Near, Kentucky

S. B. Steers, Michigan

George C. Roberts, Illinois, Alternate

This joint committee is to consist of three representatives of the Civil Aeronautics Board, the Administrator of Civil Aeronautics, and three representatives from the NASAO. The other two agencies have not yet announced their appointments.

FEDERAL

REGULATION REQUIRING NOTICE OF CONSTRUCTION OR ALTERATION OF STRUCTURES ON OR NEAR CIVIL AIRWAYS

Acting pursuant to the authority vested in me by the Civil Aeronautics Act of 1938, as amended, particularly sections 308 and 1101 of said Act, and finding that this action is required to best effectuate the policies declared in, and the purposes of, said Act, and is desirable in the public interest, I hereby adopt the following regulations:

"PART 525—NOTICE OF CONSTRUCTION OR ALTERATION OF STRUCTURES ON OR NEAR CIVIL AIRWAYS*

"525.1. Notice Required. Any person who engages in the construction or alteration of any structure along or within 20 miles of a civil airway, in other than congested parts of cities, towns, or settlements, shall give notice thereof to the Administrator of Civil Aeronautics if the top or any part of such structure is, or may become, by reason of such construction or alteration (a) greater than 150 feet above ground level, or (b) greater than 100 feet above mean water level where the structure is, or will be, situated in or over navigable water. Like notice shall also be given to the Administrator of Civil Aeronautics if the top or any part of such structure is, or may become, by reason of such construction or alteration, greater than 5 feet above ground level, or above the mean water level where the structure is or will be situated in or over navigable water, for each 500 feet, or fraction thereof, of the distance that the structure is, or will be, situated from the nearest boundary of a landing area.

"525.2 Form of Notice. The notice of construction or alteration shall be submitted in duplicate on the form prescribed and furnished by the Administrator at least 30 days, but not more than 45 days, prior to the date on which such construction or alteration is to begin: *Provided,* That in case of an emergency requiring immediate construction or alteration such notice shall be given to the nearest representative of the Administrator in person, or by telephone or telegraph, and the executed form shall be submitted within 5 days thereafter.

"525.3 Definitions. As used in this regulation—

(a) 'Congested parts of cities, towns or settlements' means (1) sections of those cities, towns or settlements which have a population of less than 100,000, where a structure after construction or alteration will be shielded by existing structures of a permanent and substantial character, each of which is equal to or greater than the height of the completed structure, and (2) sections of those cities which have a population of more than 100,000,

*See appendix for a detailed explanation of the regulation. The regulation is critically analyzed on p. 31 of the 1941 Annual Aeronautical Law Report appearing in this issue.

where it is evident beyond all reasonable doubt that a structure will not interfere with safety in air commerce whether or not the structure is, or will become by reason of the construction or alteration, greater in height than that of surrounding structures of a permanent and substantial character.

(b) 'Landing area' means any landing area, as defined in section 1 (22) of the Civil Aeronautics Act of 1938, as amended, and which is contained in the current list of landing areas issued by the Administrator on November 1 of each calendar year for the enforcement of this regulation.

(c) 'Boundary of a landing area' means (1) the limits of that part of a landing area maintained for the use of land aircraft in taking off or landing, or (2) the limits of that part of the landing area suitable for water aircraft in taking off or landing, which limits are defined as being 2500 feet in all directions measured over open water from the principal ramp of the landing area or, if marked in accordance with standard practice, the limits so marked.

(d) 'Structure,' unless otherwise stated, means any form of construction of a permanent or temporary character, including any apparatus used in the construction, alteration, or repair of any such structure.

(e) 'Alteration' means any change in a completed structure which (1) increases the height of the top or any part of the structure to, or above, the height specified in Section 525.1, or (2) increases or decreases the height of the top or any part of the structure which is above the height specified in Section 525.1.

"*525.4 Effective Date.* This regulation shall become effective on November 1, 1941, and shall apply to the construction or alteration of any structure in progress on that date, except that in such cases the prescribed notice shall not be required until November 15, 1941. This regulation shall apply immediately to any new landing areas contained in the list of landing areas published and issued by the Administrator on November 1 of each calendar year, except that, in the case of construction or alteration of any structure which is already in progress on that date, the prescribed notice shall not be required until 15 days after that date."

Administrator of Civil Aeronautics

APPENDIX

SAFETY REGULATION RELEASE NO. 71

Subject: Notice of Construction or Alteration of Structures on or near Civil Airways.

Prepared by: General Inspection Division.

Reference: Part 525—Regulations of the Administrator of Civil Aeronautics.

The Administrator of Civil Aeronautics has issued regulations requiring all persons to give adequate public notice of the construction or alteration, or of the proposed construction or alteration, of any structure located along or near a civil airway where such notice will promote safety in air com-

merce. This regulation becomes effective on November 1, 1941, and supersedes Regulations Serial No. 76, which was adopted and made effective by the Civil Aeronautics Authority on July 16, 1940.

The intent of this regulation is to require any person, before engaging in the construction or alteration of a structure covered by the regulation, to give appropriate notice of the intention to do so in order that pilots of aircraft can be informed of such work and thereby further insure safety in air commerce. Although the regulation has been prepared in a simple and understandable form, it is appropriate to explain in detail some conditions which might be open to question. To this end, the following explanatory information is provided.

The scope of this regulation extends 20 miles beyond the limits of a civil airway. As the width of a civil airway is 20 miles, it follows that the prescribed area may also be described as extending for 30 miles on either side of the center line of such an airway. It will be found that in many sections of the country the civil airways are so located that the only large areas excluded from this regulation are remote regions in the western states.

The term "navigable water" as used in section 525.1 of the Regulation includes all water suitable for the take off or landing of water aircraft. Other geographical features which combine hydrographic and topographic characteristics, such as marshes, swamps and bogs, come within the meaning of the term "land" as used in the Regulation.

The distance between the nearest boundary of a landing area and the site of the construction or alteration may be measured by the use of maps, or on the surface of the earth by an automobile mileage meter or other convenient but reasonably accurate means. Generally, if a landing area is day marked or boundary lighted, the limits of that part of the landing area, maintained for the use of land aircraft in taking off or landing, are indicated by such day markers or boundary lights, or both.

The information required with reference to any proposed construction is clearly explained on the notice forms prepared for that purpose and is essentially that material needed to properly warn airmen of a potential hazard to air commerce. It is therefore necessary that the questions thereon be answered without exception. In addition, a list of the landing areas covered by this Regulation is made available by the Administrator. Copies of the aforementioned forms, together with a list of the landing areas coming within the scope of this Regulation, may be obtained from any Regional Office or the Washington Office of the Civil Aeronautics Administration. A separate list of landing areas has been compiled for each Region. It will therefore be found convenient to request the particular list which includes those states where a person is likely to become engaged in any work coming within the scope of the Regulation.

Some latitude for repairs to existing structures is permitted by an explanation of the term "alteration." Notice may be omitted in the case of an existing structure, on which a proper notice has already been submitted, if the alteration or alterations, subsequent to the date of that notice, do not increase or decrease the height of the top or any part of the structure, from

that previously reported, by more than 1 foot for each 500 feet, or fraction thereof, of the distance that the structure is situated from the nearest boundary of a landing area, provided that, notice must be given of any alteration or alterations increasing or decreasing by more than 15 feet the height of the top of any part of a structure from that previously reported.

Any person who fails to comply with the requirements of this Regulation is liable to a penalty of $500 imposed by Section 902(a) of the Civil Aeronautics Act of 1938, as amended.

A. S. KOCH,
Director, Safety Regulation.

PILOT AND AIRCRAFT CERTIFICATES REQUIRED

Amendment No. 135 to C. A. R., Amending Sections 60.30 and 60.31
Effective: December 1, 1941

Having had under consideration the matter of the operation of uncertificated aircraft in the air space overlying the United States and the operation of aircraft in such air space by uncertificated pilots, and having held a public hearing after due notice at its office in Washington, D. C., on the 24th day of September, 1941, and

THE BOARD FINDS THAT:

(1) As of September 1, 1941, the total number of civilian pilots certificated by the Administrator of Civil Aeronautics was 181,281, including student pilots, representing an increase in the number of civilian pilots certificated of more than 200 percent since July 1, 1938, and in addition thereto there were an undetermined number of uncertificated pilots;

(2) As of September 1, 1941, the total number of civil aircraft certificated by the Administrator of Civil Aeronautics was 22, 885, representing an increase in the number of aircraft certificated of more than 130 percent since July 1, 1938, and in addition thereto there were 549 uncertificated aircraft recorded;

(3) In 1940 over 264,000,000 miles were flown in non-scheduled flying operations, representing an increase of more than 100 percent over the number of miles flown in such operations during 1938;

(4) In 1940 more than 34,000,000 miles were flown in commercial charter operations, representing an increase of more than 80 percent over the number of miles flown in similar operations during 1938;

(5) In 1940 more than 108,000,000 revenue miles were flown in domestic scheduled air carrier operations, representing an increase of more than 50 percent over the number of revenue miles flown in similar operations during 1938;

(6) During the year 1941 the aeronautical activity of the armed forces of the United States has increased tremendously and will increase in accordance with projected national defense plans;

(7) At present the civil airways cover more than 600,000 square miles or 20 percent of the territory of the continental United States;

(8) As of September 1, 1941, a total of 2,658 landing areas were reported, of which more than 40 percent were located off the civil airways;

(9) Scheduled air carrier operation which was formerly conducted only on the civil airways is no longer restricted to such airways;

(10) A great percentage of the operation of non-scheduled air carriers is conducted off the civil airways;

(11) The development of radio navigational aids will increase the operations conducted in air commerce off the civil airways;

(12) The aeronautical activity of the armed forces of the United States is not confined to the civil airways but may be conducted anywhere in the air space overlying the United States;

(13) The operation of uncertificated aircraft and the pilotage of aircraft by uncertificated airmen anywhere in the navigable air space overlying the United States constitute a hazard to interstate, overseas and foreign air commerce;

(14) The Civil Aeronautics Act of 1938, as amended, imposes upon the Board the responsibility of anticipating possible hazards to interstate, overseas, or foreign air commerce and of taking necessary action to protect such air commerce;

THE BOARD FURTHER FINDS THAT:

(1) Any operation of any aircraft in the air space overlying the United States either directly affects, or may endanger safety in, interstate, overseas, or foreign air commerce;

(2) In order to protect interstate, overseas, and foreign air commerce, it is necessary that all pilots and aircraft operating in the air space overlying the United States be certificated;

(3) The Board's action herein is desirable in the public interest, and for the protection of safety in air commerce, and is necessary to carry out the provisions of, and to exercise and perform its duties under, the Civil Aeronautics Act of 1938;

NOW, THEREFORE, the Civil Aeronautics Board, acting pursuant to the authority vested in it by the Civil Aeronautics Act of 1938, as amended, particularly sections 205(a) and 601(a) of said Act, amends the Civil Air Regulations as follows:

Effective December 1, 1941, sections 60.30 and 60.31 of the Civil Air Regulations are amended to read as follows:

"*60.30 Pilot certificates.* No person shall pilot a civil aircraft in the United States unless such person holds a valid pilot certificate or in violation of any term, condition, or limitation of such certificate: *Provided,* That an alien may pilot a civil aircraft in the United States in accordance with a pilot certificate issued or validated pursuant to a reciprocal arrangement entered into between the United States and the foreign government from which such alien holds a valid pilot certificate.

"*60.31 Aircraft certificate.* No flight of civil aircraft, other than of a foreign aircraft whose navigation in the United States has been authorized according to law, shall be made or authorized to be made in the United States unless there is outstanding for such aircraft a valid aircraft airworthiness certificate, or in violation of any term, condition, or limitation of such certificate."

By the Civil Aeronautics Board:
DARWIN CHARLES BROWN,
Secretary.

"ACCIDENT INVOLVING AIRCRAFT" REINTERPRETED

The Civil Aeronautics Board announced on November 21, 1941, a revision of its former interpretation of an "Accident Involving Aircraft." According to definition;

> "An 'accident involving aircraft' is an occurrence which takes place while an aircraft is being operated as such and results in personal injury or death, or marked or appreciable damage to aircraft."

Under the September, 1940, interpretation, an aircraft was "being operated as such" only so long as it was in motion associated with actual take-off, landing, or while in flight.

The new interpretation states that "An aircraft is considered as 'being operated as such' from the time the propeller is rotated for the purpose of starting the engine until such time as the propeller ceases to rotate or the airplane comes to a stop, whichever is later; or, in the case of gliders, from the time the aircraft begins moving for the purpose of flight or the winch or other launching mechanism begins to be operated until the aircraft comes to a stop."

Thus the latest interpretation covers every phase of aircraft operation in which an accident might occur. "Marked or appreciable damage to aircraft," in the definition, simply means damage necessitating repair before the aircraft can be considered airworthy under the Civil Air Regulations. Glider operation is also covered but was not mentioned previously.

CIVIL AIR REGULATIONS STATUS, OCTOBER 14, 1941

(At Close of Business)

Part 01 Revised September 30, 1941, effective November 1, 1941.

Part 02 Printed March 1, 1941.

Part 03 Canceled by Paragraph 1, Amendment No. 7, adopted March 17, 1939.

Part 04 Printed April 1, 1941.

04-1 Amendment No. 116, adopted June 6, 1941.

04-2 Amendment No. 129, adopted September 5, 1941.

Part 05 to 12 Unassigned.

Part 13 Printed August 1, 1941.

Part 14 Printed November 15, 1940.

Part 15 Printed November 15, 1940.

Part 16 Printed February 13, 1941.

Part 17 Unassigned.

Part 18 Printed June 1, 1941.

Part 19 Unassigned.

Part 20 Printed May 1, 1940.

20-1 Amendment No. 54, adopted May 28, 1940.
20-2 Amendment No. 63, adopted July 23, 1940.
20-3 Amendment No. 65, adopted July 30, 1940.
20-4 Amendment No. 67, adopted August 20, 1940.
20-5 Amendment No. 75, adopted October 4, 1940.
20-6 Amendment No. 82, adopted November 29, 1940.
20-7 Amendment No. 83, adopted December 13, 1940.
20-8 Amendment No. 87, adopted December 20, 1940.
20-9 Amendment No. 88, adopted December 27, 1940.
20-10 Amendment No. 99, adopted February 21, 1941.
20-11 Amendment No. 101, adopted February 25, 1941.
20-12 Amendment No. 107, adopted April 19, 1941.
20-13 Amendment No. 110, adopted May 23, 1941.
20-14 Amendment No. 111, adopted May 27, 1941.
20-15 Amendment No. 112, adopted May 27, 1941.
20-16 Amendment No. 115, adopted June 6, 1941.
20-17 Amendment No. 117, adopted June 13, 1941.
20-18 Amendment No. 118, adopted June 13, 1941.
20-19 Amendment No. 125, adopted August 5, 1941.
20-20 Amendment No. 126, adopted August 5, 1941.
20-21 Amendment No. 127, adopted August 15, 1941.

Part 21 Printed November 15, 1940.

21-1 Amendment No. 87, adopted December 20, 1940.
21-2 Amendment No. 101, adopted February 25, 1941.
21-3 Amendment No. 115, adopted June 6, 1941.

Part 22 Adopted, effective September 15, 1941.

Part 23 Canceled by Paragraph 1, Amendment No. 35, effective May 1, 1940.

Part 24 Printed May 1, 1940.

24-1 Amendment No. 44, adopted May 10, 1940.
24-2 Amendment No. 61, adopted July 12, 1940.

24-3 Amendment No. 73, adopted September 20, 1940.
24-4 Amendment No. 75, adopted October 4, 1940.
24-5 Amendment No. 87, adopted December 20, 1940.
24-6 Amendment No. 109, adopted May 16, 1941.

Part 25 Canceled by Paragraph 1, Amendment No. 39, effective May 1, 1940.

Part 26 Printed October 4, 1940.
26-1 Amendment No. 87, adopted December 20, 1940.

Part 27 Printed July 15, 1940.
27-1 Amendment No. 74, adopted September 20, 1940.
27-2 Amendment No. 75, adopted October 4, 1940.
27-3 Amendment No. 87, adopted December 20, 1940.

Parts 28 to 39 Unassigned.

Part 40 Printed November 1, 1940.
40-1 Amendment No. 85, adopted December 13, 1940.
40-2 Amendment No. 89, adopted January 7, 1941.
40-3 Amendment No. 102, adopted February 25, 1941.
40-4 Amendment No. 129, adopted September 5, 1941.
40-5 Amendment No. 133, adopted September 30, effective October 1, 1941.

Parts 41 to 49 Unassigned.

Part 50 Printed November 1, 1940.
50-1 Amendment No. 87, adopted December 20, 1940.
50-2 Amendment No. 113, adopted May 27, 1941.

Part 51 Printed May 1, 1940.
51-1 Amendment No. 75, adopted October 4, 1940.
51-2 Amendment No. 87, adopted December 20, 1940.
51-3 Amendment No. 128, adopted August 19, 1941.

Part 52 Printed May 1, 1940.
52-1 Amendment No. 75, adopted October 4, 1940.
52-2 Amendment No. 84, adopted December 13, 1940.
52-3 Amendment No. 87, adopted December 20, 1940.

Part 53 Printed September 15, 1940.
53-1 Amendment No. 75, adopted October 4, 1940.
53-2 Amendment No. 87, adopted December 20, 1940.

Parts 54 to 59 Unassigned.

Part 60 Printed October 4, 1940.
60-1 Amendment No. 76, adopted October 11, 1940.
60-2 Amendment No. 77, adopted October 18, 1940.
60-3 Amendment No. 80, adopted November 12, 1940.
60-4 Amendment No. 86, adopted December 13, 1940.
60-5 Amendment No. 90, adopted January 7, 1941.
60-6 Amendment No. 93, adopted January 21, 1941.
60-7 Amendment No. 95, adopted February 21, 1941.
60-8 Amendment No. 96, adopted February 21, 1941.
60-9 Amendment No. 102, adopted February 25, 1941.
60-10 Amendment No. 104, adopted February 21, 1941.
60-11 Amendment No. 106, adopted April 15, 1941.
60-12 Amendment No. 108, adopted May 13, 1941.
60-13 Amendment No. 114, adopted June 6, 1941.

60-14 Amendment No. 119, adopted June 20, 1941.
60-15 Amendment No. 120, adopted June 24, 1941.
60-16 Amendment No. 121, adopted June 24, 1941.
60-17 Amendment No. 123, adopted August 1, 1941.
60-18 Amendment No. 124, adopted August 1, 1941.
60-19 Amendment No. 127, adopted August 15, 1941.
60-20 Amendment No. 135, adopted October 10, 1941, effective December 1, 1941.

Part 61 Printed January 1, 1941.
61-1 Amendment No. 91, adopted January 14, 1941.
61-2 Amendment No. 94, adopted February 4, 1941.
61-3 Amendment No. 97, adopted February 21, 1941.
61-4 Amendment No. 100, adopted February 21, 1941.
61-5 Amendment No. 102, adopted February 25, 1941.
61-6 Amendment No. 103, adopted March 6, 1941.
61-7 Amendment No. 115, adopted June 6, 1941.
61-8 Amendment No. 120, adopted June 24, 1941.
61-9 Amendment No. 122, adopted July 29, 1941.
61-10 Special Regulation Serial No. 182 permitting scheduled air carriers in air transportation to operate multi-engine land aircraft on a direct route between Keyport, New Jersey and New York Municipal Airport, LaGuardia Field, New York, over the lower bay of New York Harbor at a distance beyond gliding distance from the shore without the aid of power, when such operation is authorized by the Administrator in the interest of safety, adopted August 21, 1941.
61-11 Amendment No. 129, adopted September 5, 1941.
61-12 Amendment No. 130, adopted September 12, 1941.
61-13 Amendment No. 132, adopted September 30, effective October 1, 1941.
61-14 Special Regulation Serial No. 188 permitting air carrier aircraft engaged in scheduled air transportation taking off from the Washington National Airport to be banked when an altitude of at least 300 feet has been attained and the aircraft has passed over the boundaries of the Washington National Airport, adopted September 30, 1941.
61-15 Amendment No. 134, adopted September 30, effective October 1, 1941.
61-16 Special Regulation Serial No. 192 permitting scheduled air carriers to operate multi-engine land aircraft on a direct route between Oakland, California and San Francisco, California, over San Francisco Bay at a distance beyond gliding distance from shore without the aid of power when such operation is authorized by the Administrator, adopted October 3, 1941.

Parts 62 to 89 Unassigned.

Part 90 Canceled by Regulation 601-A-1, adopted August 20, 1938.

Parts 91, 92, and 93 Canceled, Amendment No. 17, adopted July 11, 1939.

Part 94 Canceled by Regulation No. 601-A-1, adopted August 20, 1938.

Parts 95 and 96 Canceled, Amendment No. 17, adopted July 11, 1939.

Part 98 Printed November 15, 1940.

Part 99 Printed November 15, 1940.

WAR REGULATIONS CONCERNING PRIVATE FLYING

War regulations for the control of private flying were issued December 11, 1941, by the Civil Aeronautics Board. Although civil pilot certificates were suspended on December 8th by the Administrator of Civil Aeronautics grounding all civil pilots except those operating scheduled air carrier aircraft, provisions have since been made for the reinstatement of those certificates after determining that each applicant is a citizen of the United States and after investigation of his character and loyalty to the United States. For this reason the Board issued the new regulations having as their purpose the control of civilian flying both for the protection of such flying and for the prevention of sabotage and espionage by civil aircraft. There are at present 94,080 licensed civil pilots and 98,133 students who will be graduated by Spring, 1942.

The regulations forbid owners of aircraft to permit any other person to operate them unless the owner has actually examined the pilot certificate of the person desiring to use the aircraft and has secured proper identification. After January 8, 1942, all pilots will be required to carry identification cards containing their fingerprints, picture, and signature. In addition, before taking off from any airport, a pilot must present his pilot certificate and identification card to the police officer or other authorized person at the airport and secure clearance for his proposed flight. In doing so, he must also file a statement identifying the aircraft and setting out a detailed plan of his flight.

The carriage of baggage, cargo and cameras in aircraft other than those on established airlines was also restricted. Baggage and cargo can only be carried if it has first been thoroughly searched by the pilot or by someone he designates, and cameras must be made inaccessible to the passengers. The established airlines have already taken certain steps of this character, and the Board has under consideration further emergency regulations.

The text of the regulations follows:

Amendments

20.617. Permission to use aircraft. The owner of an aircraft shall not permit any person to operate such aircraft unless he has ascertained that such person is the holder of an appropriate currently effective pilot certificate by actual examination of the certificate and by requiring such person to identify himself as the person referred to in the certificate. If any pilot is found to have piloted an aircraft after December 10, 1941, without possessing an appropriate currently effective pilot certificate, the owner of the aircraft will be presumed to have permitted such piloting in violation of this section.

60.322. Pilot identification card. No pilot shall pilot civil aircraft in flight after January 8, 1942 (except scheduled air carrier aircraft) unless he has in his possession, in addition to a currently effective pilot certificate,

an identification card, satisfactory to the Administrator, containing his fingerprints, his picture, and his signature.

60.3305. Pilot clearance. No pilot of a civil aircraft, except scheduled air carrier aircraft, shall take off from any landing area unless, immediately prior to take-off, he shall have (1) received clearance from a police officer or other public representative designated at such landing area for that purpose and present at such landing area at the time clearance is granted, and (2) filed with such police officer or other public representative a written statement showing the type, color, and identification mark of the aircraft, the estimated time of departure, the point of next intended landing, the route to be followed, and the estimated time of arrival, *Provided,* that if a pilot contemplates a series of take-offs and landings for instruction, practice, or flight-testing, one clearance only need be secured for such series and, in lieu of the statement described in (2) above, he may file a statement including the type, color, and identification mark of the aircraft and setting forth his intention to engage in landing and take-off instruction or practice or flight-testing and the approximate duration of such operation. A clearance shall be granted to any person who demonstrates to the satisfaction of the police officer or other public representative to whom application is made that he is the holder of a currently effective pilot certificate and, after January 8, 1942, presents the identification card required by Section 60.322. No clearance issued under this section shall be deemed to authorize a violation of any regulation.

60.349. Passenger baggage restrictions. A pilot shall not pilot any aircraft (except scheduled air carrier aircraft) in flight carrying passenger's baggage or cargo unless every item of such baggage or cargo has been thoroughly searched by the pilot, or a person designated by him, immediately prior to taking off for the flight and placed in the aircraft by the pilot or a person designated by him, with no possession by any other person intervening between such search and the placing of the baggage or cargo in the aircraft. If such baggage or cargo includes a camera, such camera shall be placed in a closed compartment or space in the aircraft completely inaccessible to all passengers during the flight. Any pilot shall permit the search of his aircraft upon demand by any representative of the Army, Navy, Civil Aeronautics Administration, Civil Aeronautics Board, or by civil police.

WAR POLICY—C.A.B. ECONOMIC REGULATION PROCEDURE

The Civil Aeronautics Board on December 12, 1941, announced a new general policy for the immediate future in its handling of proceedings involving applications for new air carrier certificates of public convenience and necessity or for the amendment of existing certificates.

"In order that the immediate and maximum attention of air carriers and their personnel and of the Civil Aeronautics Board, as well as of other government agencies concerned," the Board stated, "may be available for the most

efficient discharge of the emergency demands growing out of the war upon which we are now engaged, the Board has decided that no hearings or pre-hearing conferences will be assigned on applications pending. Where dates have already been set, hearings will be postponed indefinitely and where final decisions by the Board are pending, no further steps will be taken after December 13. Hearings may, however, be assigned on certain applications or some pending cases carried to a decision if the Board finds that the national interest may require early inauguration of the services involved. Rate cases will be continued under an amended procedure, designed to minimize the burden which such cases impose upon operating organizations."

The new policy, the Board said, will remain in effect for such period of time as may appear to be appropriate in the light of existing conditions and their future development.

EXECUTIVE ORDER

Establishing the Office of Defense Transportation in the Executive Office of the President and Defining Its Functions and Duties

By virtue of the authority vested in me by the Constitution and statutes of the United States, as President of the United States and Commander in Chief of the Army and Navy, and in order to define further the functions and duties of the Office for Emergency Management with respect to the state of war and to assure maximum utilization of the domestic transportation facilities of the Nation for the successful prosecution of the war, it is hereby ordered:

1. The term "domestic transportation" whenever used in this Order shall include railroad, motor, inland waterway, pipe line, air transport, and coastwise and intercoastal shipping.

2. There shall be in the Office for Emergency Management of the Executive Office of the President an Office of Defense Transportation, at the head of which shall be a Director appointed by the President. The Director shall discharge and perform his responsibilities and authorities under the direction and supervision of the President. The Director shall receive compensation at such rate as the President may determine and, in addition, shall be entitled to actual and necessary transportation, subsistence, and other expenses incidental to the performance of his duties.

3. Subject to such policies, regulations, and directions as the President may from time to time prescribe, the Office of Defense Transportation shall:

a. Coordinate the transportation policies and activities of the several Federal agencies and private transportation groups in effecting such adjustments in the domestic transportation systems of the Nation as the successful prosecution of the war may require.

b. Compile and analyze estimates of the requirements to be imposed upon existing domestic transport facilities by the needs of the war effort; determine the adequacy of such facilities to accommodate the increased traffic volume occasioned by the war effort; develop measures designed to secure

maximum use of existing domestic transportation facilities; and stimulate the provision of necessary additional transport facilities and equipment in order to achieve the level of domestic transportation services required; and in this connection advise the Supply Priorities and Allocation Board as to the estimated requirements and recommend allocations of materials and equipment necessary for the provision of adequate domestic transportation service.

c. Coordinate and direct domestic traffic movements with the objective of preventing possible points of traffic congestion and assuring the orderly and expeditious movement of men, materials, and supplies to points of need.

d. In cooperation with the United States Maritime Commission and other appropriate agencies, coordinate domestic traffic movements with ocean shipping in order to avoid terminal congestion at port areas and to maintain a maximum flow of traffic.

e. Perform the functions and exercise the authority vested in the President by the following, subject to the conditions set forth in paragraph 3 of this Order:

(1) Sec. 1 (15) of Interstate Commerce Act as amended, USC title 49, sec. 1 (15).

(2) Sec. 6 (8) of Interstate Commerce Act as amended, USC title 49, sec. 6 (8).

f. Survey and ascertain present and anticipated storage and warehousing requirements at points of transfer and in terminal areas; and encourage the provision of increased storage, loading, and unloading facilities where necessary.

g. Represent the defense interest of the Government in negotiating rates with domestic transportation carriers and in advising the appropriate governmental agencies with respect to the necessity for rate adjustments caused by the effect of the defense program.

h. Advise upon proposed or existing emergency legislation affecting domestic transportation, and recommend such additional emergency legislation as may be necessary or desirable.

i. Keep the President informed with respect to progress made in carrying out this Order; and perform such related duties as the President may from time to time assign or delegate to it.

4. In the exercise of its functions and authority with respect to transportation priorities and preferences, the Office of Defense Transportation shall be governed as to the relative importance of deliveries required for defense by such instructions, certifications, and directives as may be issued by the Office of Production Management pursuant to the provisions of the Executive Order of August 28, 1941,[1] entitled "Delegation and Coordination of Priority Authority"; and the Office of Defense Transportation shall take all lawful steps within the scope of its authority to effect such deliveries through appropriate public or private agencies.

1. 6 F.R. 4483.

5. In the study of problems and in the discharge of its responsibilities, it shall be the policy of the Office of Defense Transportation to collaborate with existing departments and agencies which perform functions and activities pertaining to transportation and to utilize their facilities and services to the maximum. Particularly, the Office of Defense Transportation shall maintain close liaison with the United States Maritime Commission in the consideration of problems involving the relationship of ocean shipping with coastwise and intercoastal shipping and inland transport; with the Interstate Commerce Commission on problems of rates, routing, and car service; and with the War and Navy Departments with respect to the strategic movement of troops and supplies by domestic transportation carriers. The Office of Defense Transportation may arrange for the establishment of committees or groups of advisors representing two or more departments and agencies or private transportation groups, as the case may require, to study and develop plans for the coordination and most effective use of existing domestic transportation facilities.

6. To facilitate unity of policy and action and the use of existing governmental services, the heads of each of the following departments and agencies shall designate a responsible representative or representatives to maintain formal liaison with the Office of Defense Transportation: The Department of War, the Department of the Navy, the Department of the Treasury, the Department of the Interior, the Department of Agriculture, the Department of Commerce, the Department of Labor, the Interstate Commerce Commission, the United States Maritime Commission, the Civil Aeronautics Board, the Federal Works Agency, the Federal Loan Agency, the Board of Investigation and Research appointed under the Transportation Act of 1940, the Office of Production Management, the Office of Price Administration, the Economic Defense Board, and such additional departments and agencies as the President may subsequently designate.

7. There shall be within the Office of Defense Transportation a Division of Railway Transport, a Division of Motor Transport, a Division of Inland Waterway Transport, a Division of Coastwise and Intercoastal Transport, and such other operating and staff divisions as the Director may determine. The Director may provide for the internal management of the Office of Defense Transportation and shall obtain the President's approval for the appointment of the heads of the above divisions and such other divisions as may be established.

8. Within the limits of such funds as may be appropriated or allocated to the Office of Defense Transportation, the Director may employ necessary personnel and make provision for the necessary supplies, facilities, and services. However, the Office of Defense Transportation shall use such statistical, informational, fiscal, personnel, and other general business services and facilities as may be made available through the Office for Emergency Management.

FRANKLIN D. ROOSEVELT

THE WHITE HOUSE,

December 18, 1941.

CIVIL AVIATION—COMMERCE TO WAR

EXECUTIVE ORDER

Control of Civil Aviation

By virtue of the authority vested in me by section 1 of the act of August 29, 1916, 39 Stat. 645 (U. S. C., title 10, sec. 1361), and as President of the United States, it is hereby ordered as follows:

1. In the administration of the statutes relating to civil aviation the Secretary of Commerce is directed to exercise his control and jurisdiction over civil aviation in accordance with requirements for the successful prosecution of the war, as may be requested by the Secretary of War.

2. The Secretary of War is authorized and directed to take possession and assume control of any civil aviation system, or systems, or any part thereof, to the extent necessary for the successful prosecution of the war.

FRANKLIN D. ROOSEVELT.

The White House,
December 13, 1941.

(No. 8974)

(F. R. Doc. 41-9418; Filed, December 15, 1941; 4:11 p. m.)
(Published Federal Register December 17, 1941, Volume 6, No. 244)

NOTES, COMMENTS and DIGESTS

CORPORATE CONTROL BY OTHER COMMON CARRIERS UNDER THE CIVIL AERONAUTICS ACT*

Of the many problems of economic regulation that have arisen from the Civil Aeronautics Act,[1] those under Section 408 are among the most numerous and perplexing.[2] The first occasion on which the courts have been faced with this section arose when Pan American Airways Company petitioned the Circuit Court of Appeals for the Second Circuit for review of two decisions of the Civil Aeronautics Board.[3] American Export Airlines, Incorporated, had applied to the Board for certificates of public convenience and necessity under Section 401 and had accompanied this with an application for approval of acquisition of control by American Export Lines, Incorporated,[4] under Section 408. The Board dismissed the application for approval on the ground that approval was not necessary since the control had been acquired before the applicant became an air carrier, *i.e.* before it received the certificate of convenience and necessity.[5] In fact the steamship company had organized American Export Airlines even before the Civil Aeronautics Act was passed.[6]

Pan American, which was an intervener in the proceedings, contended that the Board erred in granting the certificates without first approving of the "acquisition of control," and that such approval was required by Sections 408(a)(5) and 408(b).[7] The reasoning of the Board and of Export was that in creating the subsidiary the steamship company had acquired control of a corporation which was not an air carrier, and that when the subsidiary became

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* Pan American Airways Co. v. Civil Aeronautics Board et al. 121 F. 2d 810 (C. C. A. 2nd 1941).

1. 52 Stat. 973 (1938), 49 USCA §401 (Supp. 1940).

2. Melone, Controlled Competition: Three Years of the Civil Aeronautics Act (1941) 12 JOURNAL OF AIR LAW AND COMMERCE 318.

3. Pan American Airways Co. v. Civil Aeronautics Board et al. 121 F. 2d 810 (C. C. A. 2nd 1941).

4. American Export Lines, Inc. is a steamship line operating in the North Atlantic.

5. In the Matter of the Application of American Export Airlines, Inc., Docket No. 238; Board Order, Serial No. 581, July 12, 1940.

6. Export was organized in 1937, whereas the Civil Aeronautics Act became effective June 23, 1938.

7. 52 Stat. 1001 (1938), 49 USCA §488 (Supp. 1940). "Sec. 408(a) It shall be unlawful, unless approved by order of the Authority as provided in this section— . . . (5) For any air carrier or person controlling an air carrier, any other common carrier, or any person engaged in any other phase of aeronautics, to acquire control of any air carrier in any manner whatsoever; . . ."

"Sec. 408(b) . . . Unless, after such hearing, the Authority finds that the consolidation, merger, purchase, lease, operating contract, or acquisition of control will not be consistent with the public interest or that the conditions of this section will not be fulfilled, it shall by order, approve such consolidation, merger, purchase, lease, operating contract, or acquisition of control upon such terms and conditions as it shall find to be just and reasonable and with such modifications as it may prescribe. . . . *Provided further*, that if the applicant is a carrier other than an air carrier or a person controlled by a carrier other than an air carrier or affiliated therewith within the meaning of Section 5(8) of the Interstate Commerce Act, as amended, such applicant shall for the purposes of this section be considered an air carrier and the Authority shall not enter such an order of approval unless it finds that the transaction proposed will promote the public interest by enabling such carrier other than an air carrier to use aircraft to public advantage in its operations and will not restrain competition."

an air carrier, the steamship company already had control, hence there was no "acquisition" under the Act. They contended that Section 408(a)(5) forbade the unapproved acquisition of a certain type of corporation, viz., an air carrier, and that the steamship company never performed such an act of acquisition. Therefore, it follows that if absence of approval here is not unlawful under Section 408(a)(5), then approval is not required under the second proviso of Section 408(b).

Thus the court faced two problems in this respect: 1. Is approval of acquisition under Section 408 a condition precedent to the granting of a certificate under Section 401?[8] 2. Do Sections 408(a)(5) and 408(b) apply to the case where a common carrier creates a subsidiary for the purpose of later becoming an air carrier?

In approaching the first of these problems the court gleaned no assistance from the terms of the Act itself. The complete absence of any statutory mandate or previous cases on this point left the court free to use its own discretion. The basis of the court's ruling that the certificates were properly granted without approval of acquisition must rest on other considerations.

No precedents in the aviation field lay before the court to help it in its determination. However, similar situations have arisen under the Motor Carrier Act of 1935.[9] Section 213(a) of that Act, which is comparable to Section 408 of the Civil Aeronautics Act, provides that it is lawful for a carrier other than a motor carrier to acquire control of a motor carrier only on condition that the Interstate Commerce Commission finds that the public interest would be promoted because the applicant was able to use motor service to the public advantage in its own operations.[10] An order of approval from the commission must be obtained. Of course, the decisions of the Interstate Commerce Commission which have come down under this section were not binding upon the Civil Aeronautics Board or upon the court, but the conditions are so nearly parallel in some respects that they were very properly used as guides. The leading case under Section 213 was *Pennsylvania Truck Lines, Inc.-Control-Barker.*[11] There approval of acquisition was at first denied on the ground that there would be competition with other railroads and truck lines; but on rehearing approval was granted to the extent that the service would be auxiliary and supplementary to the operations of the railroad. While the "auxiliary and supplementary" rule as set forth in this case and those under Section 213 that follow it, goes to the merits of the case, an issue with which the court here was not concerned, it is significant to note that the rule has also come up in cases involving an application for a certificate. In none of these cases was the certificate denied merely because the proposed operations were not auxiliary and supplementary to the operations of the parent. It is true, however, that in some instances the certificates were limited to the extent to which such operations were auxiliary and supplementary.[12] Herein

8. 52 Stat. 987 (1938), 49 USCA §481 (Supp. 1940). Section 401 requires all air carriers to obtain a certificate of public convenience and necessity and provides for the conditions and procedure for the granting thereof.
9. 49 Stat. 543 (1935), 49 USCA §301 (Supp. 1940).
10. *Id.* at 555, 49 USCA §313 (Supp. 1940).
11. 1 M. C. C. 101 (1936), 5 M. C. C. 9 and 49 (1937).
12. Kansas City Southern Transport Co., Inc., Common Carrier Application, 10 M. C. C. 221 (1938); Texas and Pacific Motor Transport Co. Common Carrier Application, 10 M. C. C. 525 (1938).

the Commission seems to have been inconsistent because in other cases it held that the rule of the *Barker* case under Section 213 was not germane in a proceeding on application for a certificate.[13] It was these latter cases which the court in the principal case chose to follow in holding that the Board properly granted the certificate to Export even though it should have considered the merits of the application for approval of acquisition.[14]

An analysis of these two conflicting types of cases will provide some justification for the court's choice. In those cases in which the granting of the certificate was limited by the "auxiliary and supplementary" rule any further operations would have caused wasteful competition and placed the applicant in an unfairly favorable competitive position. In the case at hand it was apparent to the court that the Board actually wanted to create domestic competition in the field of foreign air transportation,[15] and refused to adopt the principle of the *Barker* case. Therefore, in choosing between these two lines of cases, the court selected that which would better effectuate the apparent policy of the Board to limit Pan American's monopoly.

In the light of the Court's decision in respect to the second problem—namely, that approval of the steamship company's control over Export must be obtained from the Board—it does not seem inadvisable that the certificates were allowed to remain as granted. The authority of the Board under Section 408(e) to regulate completely any situation which it finds violates any of the provisions of Section 408 removes any necessity for further regulation by withholding a certificate. Thus the court in following the course which it did in respect to this problem, accepted the rulings under the Motor Carrier Act insofar as they gave effect to the Board's desire to create competition in overseas air transportation and at the same time did not weaken the Board's powers of economic regulation.

Under the second problem the court was required to meet the argument of the respondents (export) that Section 408(a)(5) did not apply to the case where a corporation became an air carrier at a time when it already was controlled by an outside carrier. The court regarded this as an "unduly literal interpretation"[16] of the section and held that the Board should not have dismissed the application for approval. This seems to be the more reasonable analysis of the words used, because the Board's position presented an anomalous situation in which the steamship company at one time did not control an air carrier and at a later time did control an air carrier, but at no time in the interim did it "acquire control" of an air carrier.[17] The court said that "to acquire control of any air carrier in any manner whatsoever" meant "to take all steps involved in obtaining control,"[18] and one of the steps

13. Santa Fe Trail Stages, Inc., Common Carrier Application, 21 M. C. C. 725 (1940); St. Andrews Bay Transport Bay Co. Extension of Operations 3 M. C. C. 711 (1937).

14. An interesting problem in connection with the merits of the application for approval is the possibility of a distinction if the steamship company had applied directly and not through a subsidiary. *Cf.* Illinois Central Railroad Co. Common Carrier Application, 12 M. C. C. 485 (1939).

15. 2 C. A. B. 16, 29 (1940).

16. Pan American Airways Co. v. Civil Aeronautics Board et al. 121 F. 2d 810, 815 (C. A. A. 2nd 1941).

17. *Cf.* The dissenting opinion of Board Member Ryan, 2 C. A. B. 16, 51 (1940).

18. Pan American Airways Co. v. Civil Aeronautics Board et al. 121 F. 2d 810, 815 (C. C. A. 2nd 1941).

involved in obtaining control in this case was the obtaining of a certificate to operate. Thus the "acquisition" was not complete until the certificate was granted and the granting of the certificate consummated an act for which approval of acquisition was necessary.

In the matter of precedent the court did not find as much help as in the other problem. The motor cases under Section 213 were not useful in deciding whether approval of acquisition was necessary because none of them was analogous to Export's situation. It is improbable that such a problem would arise under the Motor Carrier Act for two reasons. First, motor line territories are more fully exploited than air lines, so that an outside carrier would be more likely to take over an existing motor service than to try to create a new one in competition with those already there. Second, the definition of a motor carrier postulates existing operations,[19] whereas to constitute an air carrier there must be merely an undertaking.[20]

A common method of solving problems of statutory construction is to inquire into the intention of the legislature. The failure of the court to consider this even though counsel raised the issue indicates that the evidence of intention was not sufficiently conclusive. Yet its significance is not entirely ephemeral. The history of federal legislative activity in the field of transportation manifests a desire on the part of Congress for direct economic regulation. The Panama Canal Act of 1912, which in effect amends the Interstate Commerce Act, forbids railroads or other carriers from having any interlocking relationships with any water carrier operating through the Panama Canal or elsewhere if the railroad competes with it for traffic.[21] Also, as has been pointed out, the Motor Carrier Act of 1935 legalized such relationships between motor and other carriers only after a finding that the other carrier could use such services to the public advantage in its own operations and approval of the whole transaction by the Interstate Commerce Commission. Just as in the Civil Aeronautics Act, the language used is susceptible to an interpretation such as the Board made here. However, it appears to have been the desire of Congress to prevent the railroads from gaining such a degree of control over the motor carrier industry that they might stifle the competition it offers.[22] If some method were left so that they could, the intention of Congress would be thwarted. It seems apparent that Congress did not intend to have such an interpretation placed upon the Motor Carrier Act. The same applies to the Civil Aeronautics Act. The

19. 49 Stat. 544 (1935), 49 USCA §303 (Supp. 1940). Sections 203(a) (14) and (16) define "common carrier by motor vehicle" and "motor carrier." These definitions were explained in Crichton-Purchase-C. Lewis Lavine, Inc., 35 M. C. C. 661, 663 (1940).

20. 52 Stat. 977 (1938), 49 USCA §401 (Supp. 1940). "Sec. 1(2). 'Air carrier' means any citizen of the United States who undertakes, whether directly or indirectly or by a lease or any other arrangement, to engage in air transportation . . ." The Interstate Commerce Commission would not consider an application under §213 unless the vendor carrier was already operating. Crichton-Purchaser-C. Lewis Lavine, Inc., 35 M. C. C. 661 (1940).

21. 37 Stat. 566 (1912), 49 USCA §5(10) (1929).

22. Mr. Sadowski, speaking in the House of Representatives on Section 213, said, ". . . (I)t is the intent, and it is important to the welfare and progress of the motor carrier industry, that the acquisition of control of the carriers be regulated by the Commission, so that the control does not get into the hands of other competing forms of transportation, who might use the control as a means to strangle, curtail, or hinder progress in highway transportation for the benefit of the other competing transportation." 79 Cong. Rec., July 31, 1935, at 12206.

language repeatedly used in explaining Section 408 in both Houses was: "this section prohibits consolidations, mergers, or interlocking relationships between air carriers and between air carriers and certain other types of companies unless approved by the Authority."[23] The term "interlocking relationships" is a broad one and indicates an intention on the part of Congress to include all possible situations. There is good reason for concluding, therefore, that the decision of the court effectuated the Congressional policy.

As involved in this problem the question of public policy is important. Is the court's decision the most desirable one or would it have been better to have retained the Board's position? In his dissenting opinion, Board member Ryan pointed out that policy reasons apply identically to both situations because the result is the same—a common carrier controls an air carrier.[24] This is not entirely accurate, however. The principal arguments of policy in defense of the Board's position indicate a difference between the situations where an existing air carrier is acquired by a common carrier and where a subsidiary becomes an air carrier. To allow an existing air carrier to be acquired without approval would be to permit the parent company to become, in effect, an air carrier without any regulation of the change. This is not so where a certificate has to be obtained. However, the likelihood of successful regulation of acquisitions in certificate cases is subject to doubt. There are only two standards in Section 401(d)(1) for the discretion of the Board in making the otherwise mandatory grant of the certificate.[25] One is whether the applicant is ready, willing, and able to perform and to conform to the regulations; the other is whether the transportation is required by the public convenience and necessity. Regulation of interlocking relationships through this section is based upon the explication of public convenience and necessity as set forth in the policy section of the act.[26] Therein it is declared that public convenience and necessity require the fostering of sound economic conditions in the industry. Of course, in accordance with this the Board could place conditions in the certificate as it is authorized to do by Section 401(f); but its power to control consolidations in this manner would be limited. A carrier, by refusing to fulfill the conditions, could refrain from giving a necessary service and could place itself in a position to bargain with the Board. It is undesirable to allow any of the Board's decisions to be made under influences of this kind. The answer which Pan American made to this first argument of the Board was that under the Board's interpretation of Section 408(a)(5) a subsidiary could be acquired after its certificate was granted but before it had begun to operate and thereby avoid any regulation. The soundness of this depends upon the meaning of the words "undertakes to engage in air transportation." It is improbable that anything more than the possession of a certificate is required to create such an undertaking.[27]

The other argument which the Board made was little different from the one already stated and may be answered in the same way; namely, that because of the public interest in the industry, a company should not be allowed to vitiate the economic regulation exercised by means of conditions in the

23. 83 Cong. Rec., June 11, 1938, at 8863 (§410).
24. 2 C. A. B. 16, 50 (1940).
25. 52 Stat. 987 (1938), 49 USCA §481 (Supp. 1940).
26. *Id.* at 980, 49 USCA §402 (Supp. 1940).
27. See note 20 *supra.*

certificate by failing to perform those conditions and thereby gaining bargaining power over the Board. This second argument is that where an existing air carrier is acquired, the basis for authorization of the original certificate has changed. Like the first argument it indicates merely that it is more important to bring the normal case under Sections 408(a)(5) and 408(b), than this case. It does not show that as a matter of policy these sections should not govern the instant case.

The conclusion to be reached, then, is that there are no policy reasons capable of invalidating the remand which the court ordered for the purpose of approving the acquisition. Whatever strength there may be in the argument that direct and unencumbered supervision of such interlocking relationships is the preferable course of action, concurs with the old proverb that it is better to be safe than sorry.[28] This justifiable decision of the Circuit Court of Appeals as to the all-inclusiveness of Section 408(a)(5) raises a warning finger to any future contention that it does not apply to some other interlocking or control situation.

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28. It was suggested that if the Board's interpretation of §408(a) (5) were applied to the similar language of §408(a) (6), then an air carrier could create by the same method an airplane manufacturing company from which it could buy equipment cheaper. The fallacy of this argument is that a manufacturing company does not require a certificate, but becomes a manufacturing company at the moment of incorporation.

Revocation of Pilot's Certificate.—Appeal.—Motion for Stay of Order of Civil Aeronautics Board.—On February 28, 1941, the Civil Aeronautics Board issued its order serial number 914, In the Matter of Raymond Lee Kidd, Holder of Private Pilot Certificate No. 48357, revoking said pilot certificate. On March 26, 1941, Mr. Kidd filed a petition for review with the United States Circuit Court of Appeals for the Fifth Circuit in which he asked for a review of the Board's order and for a stay of the order pending consideration of the petition on the merits. This matter was set for argument by the Court on April 2. The Civil Aeronautics Board filed its "Points and Authorities * * * in Opposition to Prayers for Stay" in which it was argued that the Petitioner had made no showing that the Board had erred in any respect in entering the order complained of and that the Petitioner had not shown that he would be irreparably injured by denial of the stay. At the hearing, in his argument and opposition to the stay Counsel for the Board offered to argue the case on the merits at any time in order that Petitioner might have a review on the merits as speedily as possible. The Court stated that it would not take the responsibility, without a hearing on the merits, of authorizing a pilot to fly when the Board had concluded, after a hearing, that it was not safe to permit that pilot to continue flying. Accordingly, the Court denied the stay from the bench and set the case down for hearing on the merits on April 21, 1941, and ordered both parties to file briefs on or before that date. On April 18, 1941, Counsel for Petitioner requested a continuance. This was granted by the Court and the case passed to the November term. Subsequently, the case was set for hearing on the merits on December 9, 1941. On or about November 12, 1941, Petitioner

filed a motion to dismiss his appeal and on that day the Court entered its order of dismissal.

In a similar case a stay was recently refused by the United States Circuit Court of Appeals for the Second Circuit.

On September 24, 1941, the Civil Aeronautics Board entered its order serial number 1265 suspending for a period of sixty days the commercial pilot certificate No. 1199 held by Hugh C. Robbins. On October 2, 1941, Mr. Robbins filed a petition for review of the order of the Board and a motion for a stay of the Board's order in the United States Circuit Court of Appeals for the Second Circuit. The "Points and Authorities of the Civil Aeronautics Board in Opposition to Motion for Stay" were filed with the Court. The hearing on the motion to stay was returnable on October 6th. At the hearing Counsel for the Board opposed the motion and offered to argue and submit the case on the merits immediately. The Court refused this offer. However, during Petitioner's argument all of the questions asked by the Court went to the merits. The Court inferred that no stay would be granted unless it was clearly indicated and shown by Counsel for Petitioner that there was merit in Mr. Robbins' petition for review. At the close of the argument the Court borrowed from Counsel copies of the transcript (of the hearing held by the Board). On October 8, 1941, the Court denied Petitioner's motion for a stay and on October 16, Petitioner filed a stipulation to dismiss.

Workmen's Compensation.—Status of Reserve Pilot Under Statute Determined by Yearly Earnings Whether Acting as First Pilot or Co-Pilot at Time of Accident.—Russel C. Mossman was an employee of the Chicago & Southern Airlines and was killed on August 5, 1936, when an airplane operated by said company crashed in St. Louis County, Missouri. A claim was brought by his widow, Melba May Mossman, against the employer before the Missouri Workmen's Compensation Commission. The Referee before whom the case was heard found in favor of the employer, after which the claimant appealed to the full Commission. The Commission affirmed the decision of the Referee, with one of the Commissioners dissenting. Claimant then appealed to the Circuit Court of St. Louis County, which again affirmed the award of the Commission. An appeal was then taken to the St. Louis Court of Appeals and the final decision of the Missouri Courts was rendered affirming the decision in favor of the employer.

Mossman had for some time been a first pilot, but on June 1, 1936, his status was changed to that of reserve pilot. As reserve pilot he would sometimes sit in the first pilot's seat and sometimes in the co-pilot's seat. When acting as first pilot he earned a first pilot salary computed on a rate of base pay plus flying time and when acting as co-pilot he received a co-pilot straight salary of $225.00 per month. At the time of his death he was acting as co-pilot in the plane.

The claimant contended that inasmuch as he was acting as co-pilot at the time of his death his status was that of a co-pilot and his pay was $225.00 per month. Under this theory the employee would be covered by

the Missouri Workmen's Compensation which covers such employees who earn less than $3600.00 per year. The employer contended that Mossman could not be considered to be a co-pilot merely because he was sitting in the co-pilot seat at the time of the accident but that he still must be considered to be a reserve pilot and his status must be based upon income earned by him as a reserve pilot. The evidence disclosed that during the period he had served as reserve pilot his earnings would have averaged $3753.00 for the full year period.

The Court of Appeals held that Mossman must be considered to be a reserve pilot whether he was acting as first pilot or co-pilot at the time of his death; that the Court would not adopt a construction which would compel it to rule that his status would change from day to day depending upon the specific task of that particular day. At all times he was held to be a reserve pilot. Therefore, inasmuch as his earnings exceeded the $3600.00 limitation of the Compensation Act, the Court declared that he was not under the Act and the decision should be in favor of the employer.

Claimant filed a Motion for Rehearing which was denied by the Appellate Court on September 12, 1941. *Mossman v. Chicago & Southern Airlines, 153 S. W. (2d) 799* (1941).

BOOK REVIEWS

AIR TRANSPORTATION. By Claude E. Puffer, University of Buffalo: The Blakiston Company, Philadelphia, 1941. Pp. 675.

This fat volume contains a detailed account of the economic and legal characteristics of air transportation as an industry. This account, for the most part, covers an investigation and statement of the activities and decisions of the Interstate Commerce Commission, of the Civil Aeronautics Authority, and of the latter agency as now subdivided into the Civil Aeronautics Board and the Civil Aeronautics Administration. The laws covered begin with the Kelly Act of 1925 and end with the Civil Aeronautics Act of 1938, including the 1940 Presidential Reorganization of the Civil Aeronautics Authority. The purpose of the book, in the words of the author, is "to investigate the economic and legal characteristics of the air transportation industry in an effort to decide whether or not the industry should be regulated; to analyze present and past federal legislation to determine whether it has been sound or unsound; to evaluate the efficiency with which federal laws have been administered; and to suggest improvements in law or administration." The evaluation is accomplished by eight subchapters entitled "Conclusions," which close a like number of selected chapters.

The text is written in a clear style designed for easy reading and the subject matter of the chapters and their arrangement is appropriate and logical. Chapter I deals with historical material; Chapters II and III give the highlights of the economic and legal characteristics of the air transportation industry, viewed in its broadest aspects; Chapter IV describes the regulatory agency set up by the Civil Aeronautics Act of 1938; Chapters V, VI, VII, VIII, IX, and XI deal with the various powers and duties of this regulatory agency evaluated against the background of legislative history and previous aeronautical administrative activities; Chapter X deals with the regulation of aviation labor relations; and Chapter XII reviews other federal regulation and aids. The appendices give important and useful tables (including reference to those in the text) which show the development of the air transportation industry, together with a valuable selected bibliography. The text has numerous footnotes and there are cross-references at certain key points.

This volume should prove a valuable reference work to the air transport industry and a useful text to the teaching profession in the fields of aeronautical law and commerce. Its chief worth is that it represents a painstaking job of exploring the whole subject matter of air transport. Its table of contents is unusual in its completeness. The new contributions to the field, in a book of this kind, consist of chapters dealing rather fully with labor relations and with presently existing federal activities other than those of the Civil Aeronautics Authority.

The limitations of the work consist in its attempt to cover the entire field of air transport. In this respect it is like any one-volume encyclopedia in that you find something valuable, and not too incomplete, about anything and everything, but the reader must go elsewhere to get the whole picture of any one activity and of the philosophy connected with it. For such a detailed effort the book has two serious omissions: one, the failure to give an account of and to evaluate the work of the Bureau of Air Commerce in laying the background for and helping write and pass the Civil Aeronautics Act of 1938, and, two, in using footnote citations to a newspaper which does not have its back files generally available in the large libraries of the country. Also, the somewhat numerous footnotes, citing letters from certain individuals, would have greater force if the references were to the policies or the data of the aeronautical organizations to which these individuals belong.

HOWARD C. KNOTTS.

AIR MAIL PAYMENT AND THE GOVERNMENT. By Francis A. Spencer: Institute of Economics, The Brookings Institution, 722 Jackson Place, Washington, D. C. Pp. 402.

This volume is a study submitted by the author as a Fellow of The Brookings Institution to its Institute of Economics. It was originally designed as a doctoral dissertation at Princeton University with its scope limited to the adjustment of air mail pay by the Interstate Commerce Commission. That study was enlarged to the present work which covers that part of the field of air transportation which is concerned with the place of air mail pay in the development of commercial transportation, and the relationship between the government and the air carriers (domestic, for the most part) in connection with the determination and adjustment of such air mail pay.

Chapters in the book include: I. Emergence of the Issues and Problems of Air Mail Compensation; II. Government Operation of Air Mail, 1918-27; III. Early Period of Contract Air Mail Operation, 1925-30; IV. Air Mail Rates and Regulation of Carriers Under the Watres Act, 1930-34; V. Army Operation and "Temporary" Contracts; VI. Air Mail Act of 1934; VII. Rate-Making Technique and Control of Accounting Practice Under ICC; VIII. Distinctive Problems in the Control of Air Mail Compensation; IX. Depreciation Allowances; X. The Rate Base; XI. Rate of Return; XII. Rates and Rate Scales Under the ICC; XIII. The Civil Aeronautics Act and Rate-Making Procedure; XIV. Air Mail Compensation Under the Civil Aeronautics Act; and XV. The CAB and the Future. The appendices include all federal legislation affecting air mail, starting with the Air Mail Act of 1925 and concluding with the pertinent provisions of the Civil Aeronautics Act of 1938. They further include divisions headed Bibliography, Cases Cited, and Index, each unusual in its completeness. Three principal parts constitute the plan of the book: Chapters II through V present a historical and analytical account of the period of Post Office control; Chapters VI through XII similarly cover the procedures and problems which characterize the period of fixing of air mail rates by the Interstate Commerce Commission; and Chapters XIII through XV deal with the rate-making procedure

under the Civil Aeronautics Act of 1938, plus a posing of some future problems based upon the entire study.

The subject matter considered in this book is difficult because the economic and administrative issues are so closely related, and heretofore the field has been inadequately explored. This volume is an exhaustive and truly analytical study of the problems involved. The language, the tabular data, and the citations employed, plus the completeness of the treatment of the subject matter as a whole, give the book first rank in its field. The study does not purport to cover the whole field of air transportation, but it is so co-related with it that the reader can get all necessary information within its covers. Indeed, the researcher can cover the entire field by the employment of this text and the source material in and cited by its footnotes. The future problems posed at the end of the book deal with the troublesome adjustments in air mail pay, immediately in the offing, as to those air carriers with large and increasing passenger and express revenues. Here unreasonable profits must be checked without jeopardizing the formula for air mail pay by which compensation goes to the smaller air carriers whose passenger and express revenues are not an important part of their gross income. The warning given by the author is that of one who understandingly deals with a problem to be faced.

There is good reason for the author's having accomplished so much. He has a splendid economic background at both Northwestern University and at Princeton University, and he is a member of the American Economic Association, National Aeronautic Association, and Reserve Officers' Association. He flew during the years 1936, 1937, and 1938, for one of the large oil companies and he holds a commercial pilot certificate. He is also a military pilot and a Second Lieutenant in the Air Corps Reserve, assigned to Intelligence Division, Office of Chief of Air Corps, United States Army. Presently, unless he has been called to active duty, he is a member of the staff of J. Parker VanZandt, Technical Consultant, Civil Aeronautics Board.

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